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THE EMERGENCE OF U.S. HOSPITAL-BASED DOULA PROGRAMS

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DEDICATION

This work is dedicated to my mother. I have watched her my whole life provide support to women in our community as a maternal health nursing professional, lactation consultant, neighbor and friend. It is people like her and the work she is dedicated to doing that bolsters community in a very real and tangible way. She works one woman at a time showing compassion for and confidence in each woman she works with, providing them with tools for success as mothers. Her work, like the doula work in this manuscript, continues to inspire me. My hope is that the work of people like my mother, to support women of all walks of life during critical moments of transition, expands and is championed by our larger healthcare institutions so that our infrastructure supports the very real work being done for women and families on the ground, person to person.

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First, I would like to acknowledge those involved in my own personal doula journey; my trainers Cindy Kerbs (DONA) and Susan Smart (CAPPA), my mentor doula Judy Steinlin for showing me what grace, competence, and unconditional support looks like in practice, and to the many women that I have had the privilege to accompany during childbirth. I acknowledge my son, Oliver Liam, and the personal lessons and experiences that accompanied my own entry into motherhood through my pregnancy, his birth and first 3 years of life that coincided with this dissertation endeavor. I would also like to acknowledge the value and centrality of each participant in this project, for their work and dedication to support women during the time of pregnancy and birth and for their role in developing my views and perspectives on what doula support means and can mean in different places for different people. I would also like to acknowledge the consistent support, encouragement, and unique insight of my partner Michael Beets and my parents, Effie-Jo and Don Lindstrom. I also thank my committee, Drs. Frongillo, Billings, Messias and Gibson, for pushing me to think deeper and in different ways about this topic and its presentation, for their support, and above all their time. To all those mentioned above, thank you for sharing your work, your passions, and your time; it has been instrumental to my learning process and the work presented in this manuscript.

ABSTRACT

Labor and birth related health outcomes remain suboptimal in the US. New initiatives and improvement efforts include peer and social support. Doula support is built on the concept of social support, including emotional support, comfort measures, information, and advocacy. Benefits of doula support include increases in women's satisfaction with their childbirth experiences, postpartum interaction with infant, breastfeeding initiation, and APGAR scores, and reductions in cesarean deliveries, length of labor, use of analgesia, and healthcare costs to healthcare systems. Doula services based within the hospital are a relatively new phenomenon. How and why hospitals are incorporating doula services has not been studied. This dissertation identified factors and decisions involved in the adoption of hospital-based doula programs across the United States, and investigated the scope and services of U.S. hospital-based doula programs including doula training, contractual relationships of doulas with the hospital, cost to women, how doulas are connected with women, and the scope of doula commitment.

This was a qualitative study. We targeted all identifiable hospital-based doula programs in the US for inclusion in this study. Through an internet search and snowball sampling, 50 programs were identified. Of these, 40 met inclusion criteria: 1) currently operational, and 2) hospital-based. We conducted semi-structured phone interviews

with doula program managers at 32 U.S. hospitals, for a response rate of 80%. We reviewed two additional program websites whose existence was verified, but did not participate in interviews. This information was included in Manuscript 1. All interviews were recorded via CallTrunk for iPhone and transcribed for analysis. We used emergent coding techniques. Adoption of innovations and Shiffman's social constructionist frameworks guided data collection and analysis.

The majority of hospital-based doula programs were initiated by individuals of various positions within the hospital (n=28). Only four programs were started by independent doulas that approached hospital administrators. Individuals involved with program initiation viewed doula support as beneficial in several respects: for the health of women, as a tool to attract women to the hospital, and as an important component of initiatives to improve maternity care. These actors also viewed doula support as a mechanism to advance outcomes for women (e.g., satisfaction, reduction of interventions, improved outcomes for vulnerable groups of women) and influence practices (e.g., introduce doulas into medical model of care, ensure equitable access to doula support, provide options) within the institution.

Doula support was instituted within hospitals as either a stand-alone program, that complemented general service, or introduced as a component of a larger initiative within maternity care. It was continued within institutions because of its importance for business via patient satisfaction, cost savings, and marketplace edge, and through persistent advocacy from individuals within the hospital.

Variation across doula service delivery was common. Most programs required (n=14) and/or provided on-site training (n=14); six required certified doulas. Most programs were offered free of charge to women (n=27), although others cost as much as \$750. We identified three contractual relationships of doulas with the hospital: volunteer, staff, and contract. Doula assignment models included prenatal assignment (n=7) and on-call shifts (n=22); some offered both (n=6). The scope of doula commitment across the labor and birth trajectory varied; most programs encouraged doulas to stay with the woman until the baby was born.

The ideas through which program adopters understood and portrayed the importance of doulas were important for garnering support at program initiation. Perspectives of the individuals involved with program initiation and development sometimes differed from the larger institutions' understanding and rationale for formal program adoption and continued support of the program. Doula service delivery varied across hospital settings. Among the hospitals that participated in the study, the majority were volunteer programs. The average program was 10 years old. It remains to be known whether and how the variations in doula service delivery across programs influence outcomes. Whether and how these variations influence labor and birth outcomes require further research.

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CHAPTER 1

INTRODUCTION

Despite advances in medicine and the amount of money spent on healthcare, maternity care remains suboptimal in the United States (US). The US ranks 50th in the world for Maternal Mortality (Bingham, Strauss, & Coeytaux, 2011). The current maternal mortality rate of 13.3 (2006 data) is an increase from 6.6 deaths per 100,000 live births in 1987. Of the 1.7 million women (80% of women) who give birth each year, a third experiences some type of complication ("Maternal, Infant, and Child Health," 2013; Amnesty, 2010). These complications range from depressive symptoms to the need for a cesarean delivery ("Maternal, Infant, and Child Health," 2013; Amnesty, 2010). Innovations and improvement efforts recognize the centrality of social support for women across the spectrum of maternity care from prenatal care to postpartum follow-up. Continuous labor support, most often provided in the form of a birth doula, is one such innovation. Doulas acknowledge the emotional needs and the importance of the experience for a laboring mother and are recognized as women that provide emotional, physical, informational, and partner support, as well as advocacy in the form of mediation and information giving (Gilliland, 2002).

Continuous labor support has been recognized worldwide as beneficial to women (Campbell et al, 2006). Most significantly, continuous labor support is important for improvement of a woman's experience of her childbirth. A woman's

childbirth experience follows her throughout her life, and the overall experience is an important outcome of labor (Lundgren, 2008). Women with continuous labor support have a reduction in cesarean delivery rates, length of labor, the need for analgesia, operative vaginal delivery, and 5-minute APGAR scores less than 7 (Campbell, Lake, Falk, & Backstrand, 2006; Hodnett, Gates, Hofmeyr, & Sakala, 2007, 2012; Hodnett, Lowe, Hannah, Willan, Stevens, Weston, Ohlsson, Gafni, Muir, Myhr, & Stremmler, 2002; Kozhimannil, Hardeman, Attanasio, Blauer-Peterson, & O'Brien, 2013). These benefits are most significant when continuous labor support is provided by a support person whose only responsibility is to provide labor support (i.e., not also a nurse or midwife), is not a member of the woman's social network, and has at least a modest amount of training and experience (Hodnett, et al., 2012). In the US this person is referred to as a doula. While doula support exists in other countries, some countries already have built labor support into their maternity care systems, and as such may not need the same level of additional support (Ford & Ayers, 2009).

Until recently, doula services were offered privately and through community-based settings. Few hospitals meet this demand and provide this beneficial service for women. Published success and evaluation of a handful of these hospital-based doula programs is limited and emphasize outcomes (e.g., length of labor) associated with their program (Mottl-Santiago, Walker, Ewan, Vragovic, Winder, & Stubblefield, 2008; Paterno, Van Zandt, Murphy, & Jordan, 2012). Doula support within the hospital setting is relatively new, and it is not offered at most hospitals. The components and structure

of these programs as well as the reasons why and how these programs are initiated within the hospital setting has not been studied. The aims of this study were as follows:

Aim 1: Identify factors and decisions involved in the adoption of hospital-based doula programs across the United States.

Aim 2: Investigate the scope and services of US hospital-based doula programs including doula training, contractual relationships of doulas with the hospital, cost to women, how doulas are connected with women, and the scope of doula commitment.

The specific research questions were:

1. What are the service delivery models of hospital-based doula support?
2. Who is involved with hospital-based doula program initiation?
3. Why is doula support initiated?
4. How is the introduction of doula services into the hospital achieved and maintained?

The research aims were examined through qualitative methods. Data sources included semi-structured interviews with those involved with program adoption and management at 32 U.S. hospitals and program websites of 34 hospital-based doula programs. We used content analysis guided by Shiffman's social constructionist framework (details in Chapter 2) (Shiffman, 2009) to analyze the data.

Chapter 2 presents the background and significance of this research. It highlights the connection of doula support to health outcomes and the current direction of healthcare services. Knowledge gaps about hospital-based doula support are identified.

Chapter 3 describes the methods that guided the research. Chapter 4 contains findings, presented in the form of two manuscripts. In Chapter 5 we draw conclusions about the larger questions of why and how this psychosocial innovation of doula support is being mainstreamed within hospitals at this current point in history. Implications for hospital-based doula service delivery and future research are discussed.

CHAPTER 2

BACKGROUND AND SIGNIFICANCE

This chapter will build the background and significance for this dissertation work that examines the emergence of hospital-based doula programs and provides a description and intentional analysis of their service delivery models. I build the case for the timeliness of this research endeavor by following the outline provided below. I begin by establishing the need for innovations to improve the current status of maternity care in the US, discuss the role of social support in healthcare and maternity care improvement efforts, and detail the evidence base and definition of doula support and its potential for maternity care improvement.

BACKGROUND

2.1 CURRENT STATE OF MATERNAL HEALTH – LABOR, BIRTH, COSTS

The United States (US) has some of the most expensive healthcare in the world (*The Healthcare Costs of Having a Baby*, 2007). Within these medical expenses, childbirth makes up 25% of hospitalizations and costs a family on average \$8,802 to have a baby- \$7700 for a vaginal birth and \$11,000 for cesarean birth (*The Healthcare Costs of Having a Baby*, 2007). Despite the cost and technological advances in medicine, maternal and infant health remains suboptimal in the United States, even addressed as a human rights failure by Amnesty International. The US ranks 50th in the world for

Maternal Mortality (Amnesty, 2010). The national maternal mortality ratio is 13.3 deaths per 100,000 live births, and is even greater in some areas (e.g. Georgia and Washington, DC), for women of color, immigrants, racial and ethnic groups, women on low incomes, and the uninsured and under-insured (Amnesty, 2010). The current maternal mortality rate (2006 data) reflects an increase from 6.5 deaths per 100,000 live births in 1987 (Amnesty, 2010).

Severe maternal morbidity, another indicator of how the healthcare system is addressing the physical and psychological conditions for women that are aggravated or induced by pregnancy and birth, continues to increase in the US (CDC, 2014). This increase is attributed in part to the increase in maternal age, pre-pregnancy obesity, pre-existing medical conditions, and cesarean delivery (CDC, 2014). Of the 1.7 million women (80% of women) who give birth each year, a third experiences some type of complication ("Maternal, Infant, and Child Health," 2013; Amnesty, 2010; Sonosky, Morrand, Weiss, Russell, Dias, Zheng, & Bettegowda, 2009). These complications include depression to cesarean delivery ("Maternal, Infant, and Child Health," 2013; Amnesty, 2010; Sonosky, et al., 2009).

Current rates of medical intervention remain higher than recommended. We highlight cesarean birth as an example of medical intervention that is often the result of a cascade of interventions (Tracy, Sullivan, Wang, Black, & Tracy, 2007). The World Health Organization recommended an optimal rate of 15% for cesarean section in 1985, and in 2009 has modified this to include the caveat that very low and very high rates of cesarean section are dangerous (Lake, 2012). Regardless of no optimal number, experts

in the US tend to agree that the U.S. cesarean rate is higher than medically necessary (Lake, 2012; Vahratian, Siega-Riz, Savitz, & Zhang, 2005). It saw a 60% growth between 1996 and 2009, a decline from 2009 to 2010, and has remained stable since then at 32.8% (Martin, Hamilton, Osterman, Curtin, Mathews, & Mathews, 2013). This average hides disparities for different groups; increases in cesarean delivery rates occurred for non-Hispanic black women (35.8%) and Hispanic women (32.2%), and declined, albeit nominally, 0.1% for non-Hispanic white women (Martin, et al., 2013). Part of this is due to the older and overweight population of women having babies; this is both positive and negative as the number of births for teens has decreased (CDC, 2014; Lake, 2012; Martin, et al., 2013).

Vaginal birth is recognized in the medical community as the safest option in normal, low-risk pregnancies, yet cesarean births continue to increase in the US resulting in health risks to women and infants. Risks of the cesarean procedure are multiple for the mother and the baby. A 2005 global cohort study found that women undergoing cesarean delivery had an increased risk of severe maternal and neonatal morbidity, antibiotic treatment, and longer hospital stays and recovery for infants with cephalic presentations (Villar, Carroli, Zavaleta, Donner, Wojdyla, Faundes, Velazco, Bataglia, Langer, Narvaez, Valladares, Shah, Campodonico, Romero, Reynoso, de Padua, Giordano, Kublickas, & Acosta, 2007). The March of Dimes outlines risks to both the mother and the baby after and during cesarean birth. Many babies that are delivered by cesarean section are late preterm, resulting in infant breathing, feeding, jaundice, and temperature regulation problems ("C-Section: Medical Reasons," 2008; Villar, et al.,

2007). The anesthesia also may cause the baby to be “inactive or sluggish”. Mothers also are at an increased risk of bleeding, infection at the incision site, reactions to the medications, injuries to the bladder or bowel, blood clots in the legs, pelvic organs or lungs, and maternal death is more likely with cesarean birth ("C-Section: Medical Reasons," 2008; Villar, et al., 2007). Surgical births not only increase the recovery time for women, but also cost more. A recent study of 2010 MarketScan® Commercial and Medicaid databases found that both Commercial and Medicaid payers paid approximately 50% more for cesarean than vaginal births; this figure includes maternal and newborn care (Analytics, 2013). Given the risks involved with cesarean delivery, this procedure should be limited to high, risk emergency cases.

2.2 MEDICAL MODELS AND PARADIGM SHIFTS IN U.S. MATERNITY CARE

The high rates of intervention are indicative of the medicalization of childbirth. The Technocratic Model of Medicine reflects Western society’s core value system that is oriented toward science, high technology, economic profit, and patriarchal governed institutions, at its heart is the mechanization of the body and the separation of the mind and body (Davis-Floyd, 2001). In this model, the provider of care is the “deliverer” of knowledge. By establishing this hierarchy of knowledge, the relationship between provider and patient is one of power-over. Diagnosis of symptoms and of health is not focused on a dialogue between patient and provider, but more so the ability of technology to confirm and diagnose patients. This continues into the realm of treatment where technology, often in the form of medicine, is the treatment prescribed. Over emphasis on diagnosis and treatment through technology obscures the

importance of prevention and active involvement of individuals in their own health and wellbeing.

Hospital systems are shifting away from the medicalization of healthcare in some ways more than others. One of the ways this occurs is through the idea of patient-centered care. Patient-centered care is central to health communication research and is generally understood to broaden conventional medical approaches through inclusion of patient views and promotion of the physician-patient partnership (Ishikawa, Hashimoto, & Kiuchi, 2013). This partnership is critical in the case of childbirth, given the importance and significance women may place on this episode in their life.

Some practices and women are seeking to incorporate elements of the midwifery model of care that is women-centered and views childbirth as a normal event, rather than a medical crisis. Others have moved away from this idea of returning to midwifery as it dichotomizes the midwife from the obstetrician, and herald a humanistic model of medicine (Davis-Floyd, 2001; Morton, C. H. & Clift, E.G., 2014). Robbie Davis-Floyd, presents a humanistic model for healthcare and childbirth more specifically. This model has twelve tenets, the first one is mind-body connection, which “allows for the possibility that the laboring woman’s emotions can affect the progress of her labor, and that problems in labor may be more effectively dealt with through emotional support than through technological intervention” (Davis-Floyd, 2001, p. 6). Through this perspective and the general movement towards patient-centered and patient-driven healthcare, social support, including emotional support, is gaining traction for healthcare generally and maternal health specifically.

2.3 SOCIAL SUPPORT IMPORTANCE FOR MATERNAL HEALTH

The behavioral theory construct of social support is defined as the functional content of relationships that can be categorized into four categories. These supports are a) ***emotional***, b) ***cognitive or informational***, c) ***material*** and d) ***appraisal*** (Hodnett, et al., 2007). Recent improvement efforts and innovations for health care generally, and specifically for nursing and maternity care, have included social and peer support components, including emotional support, as a means to improve psychosocial health and general wellbeing (Dennis, 2003a; Reblin & Uchino, 2008; Sobel, 1995). This emphasis parallels the movement of healthcare to integrate psychosocial interventions as a complement to biomedicine (Sobel, 1995), from disease-preventing to health promoting (Dennis, 2003a), and the on-going work of the women's health movement started in the 1960's to reform healthcare (Kuhlmann, 2009). Examples include group prenatal care, peer support in the form of community-based doulas throughout pregnancy and for breastfeeding, WIC breastfeeding peer-counselors, Nurse-Family Partnership that entails home visitations and follow-up with women postpartum, Strong Start for Mothers and Newborns Initiative, social support for women birthing terminal babies, and our example here of birth doula support (Ickovics, Reed, Magriples, Westdahl, Schindler Rising, & Kershaw; Kozhimannil, et al., 2013; Langer, Campero, Garcia, & Reynoso, 1998; Mottl-Santiago, et al., 2008; Picklesimer, Billings, Hale, Blackhurst, & Covington-Kolb, 2012; Sauls, 2002)(cite NFP, Strong Start).

2.4 DOULA ROLE AND SCOPE OF PRACTICE

Doula support is a type of social support that is growing in popularity, in evidence, and as means to improve maternity health outcomes. Outcome related literature is problematic and doulas themselves question whether doulas should be considered an intervention (Moore, 2004; (Morton, C. H. & Clift, E.G., 2014). Why this is in question is evident in the doula role and scope of practice. At the heart, a doula is not present to push an agenda or advance her own ideas (Morton, C. H. & Clift, E.G., 2014). She is present with the laboring woman as her constant support.

A doula is experienced and professionally trained to provide continuous support to the birthing family, (Meyer, Arnold, & Pascali-Bonaro, 2001), help her make informed choices, and feel safe and confident throughout the process. Social support forms the basis of doula care, and includes informational support, physical assistance, and emotional support (Meyer, et al., 2001). Doula support includes offering information about the process of labor and the choices involved (i.e., educational support), physical assistance in managing the pain of labor (e.g., bath or shower, massage, soothing touch, breathing or relaxation techniques), and emotional support (e.g., encouraging the woman to trust her body and the process of labor and birth, offering reassurance, honoring a woman's emotions) (Meyer, et al., 2001). The doula role does not include performance of any clinical tasks, or to make decisions for the family.

The leading doula certification agency, DONA (Doulas of North America International), outlines seven objectives of the doula role:

1. Recognize birth as a key life experience that the mother will remember all of her life;

2. Understand the physiology of birth and the emotional needs of a woman in labor;
3. Assist the woman and her partner in preparing for and carrying out their plan for the birth;
4. Stay by the side of the laboring woman throughout the entire labor;
5. Provide emotional support, physical comfort measures, an objective viewpoint, and assistance to the woman in getting the information she needs to make good decisions;
6. Facilitate communication between the laboring woman, her partner, and clinical care providers; and
7. Perceive the doula's role as one who nurtures and protects the woman's memory of her birth experience. (Papagni & Buckner, 2006)

It is important to note that not all doulas are birth doulas; some are postpartum doulas, others abortion doulas, and/or trained in all of these and other areas of doula support. These doulas provide similar social support, though their experience and training emphasizes a different "episode" in a woman's reproductive lifecycle (Perez, 2012). The focus of this dissertation is the birth doula.

2.5 HISTORY OF BIRTH DOULA MOVEMENT

The history of childbirth in the US is dynamic and politically charged. The shift from a social childbirth philosophy to a medical-illness model in the 1930s is central to this historical trajectory (Papagni & Buckner, 2006), as is the increasing influence of technology on labor and birth (Green, Amis, & Hotelling, 2007). Highlights of this transition of birth into the hospital include widespread anesthesia use by 1940, routine electronic fetal monitoring by 1970, and general management of labor through

augmentation and induction via Pitocin (Papagni & Buckner, 2006). As intervention rates have increased, women have had less control over their labors and births. Use of interventions and procedures developed out of the need to address and save the lives of mothers who experience complications during labor or birth are now common among healthy, low-risk, women giving birth in the US. Movements back toward the natural process of labor and re-invigoration of the midwifery model of care have spurred the reintroduction of female companions in labor.

Although, women have supported women during childbirth throughout history, Friends, family members, midwives who provide emotional support, physical aid and comfort throughout labor did not accompany women into the hospital with this major shift from home birth to medical settings (Klaus & Kennell, 1997; Sauls, 2002). Nursing care came to embody this type of caring work and emotional and one-on-one support historically was central to maternity care and implicit in the nursing profession (Green, et al., 2007; Leslie & Storton, 2007; Reblin & Uchino, 2008). This has been de-emphasized and frequently de-valued through the transition of birth from home to hospital, which has marked an increase in health care costs, medical specialization and technology, shortened hospital stays, and reduced interpersonal communication between health professionals and their clients (Dennis, 2003a); Eng and Young, 1992 (Green, et al., 2007).

Now with 4,664,000 US women delivering their babies in the hospital, dissatisfaction with the high rates of intervention, and general fear and uncertainty about labor and birth, there has been a shift back to seeking labor support and

accompaniment from other women, gaining renewed traction and attention during the 1980's (Gagnon, Waghorn, & Covell, 1997). Many factors contributed to this renewal, including the requirement of childbirth educators to attend labors and births, the emergence of the cesarean prevention movement due to consumer awareness of the rise in cesarean rates, published research in the 1970's by Klaus and Kennel that found benefits for women that had labor support, and the growth of the role of the nurse-midwife between 1960 and 1970 (Gagnon, et al., 1997; Gilliland, 2002; Rooks, 2014). It was Klaus and Kennel's research on the benefits of female companionship in the 1970's that gave the term doula its meaning for the doula profession today (Andreoulaki, 2013).

Doula support continues to grow as a paraprofessional service today (Lantz, Low, Varkey, & Watson, 2005; Leslie & Storton, 2007). A recent survey of certified doulas found that most doula service is provided independently (79.9% individual practice, 19.8% collaborative business). Others practice in community-based (1.8%) and hospital-based (1.8%) settings (Lantz, et al., 2005). Doula support within the hospital is a relatively new innovation and is not offered at most hospitals (Bromberg Bar-Yam, 2003; Lantz, et al., 2005).

2.6 DOULA TRAINING

The development of doula support from a supportive friend to a community health worker to paraprofessional is somewhat controversial, although it is most recently understood as a paraprofessional (Lantz, et al., 2005). Different doula groups and research articles lay claim to different terms. This is reminiscent of peer-support

work that outlines the conceptual distinctions of peer support from natural lay helpers to peers to paraprofessionals; the difference between these has to do with the level of training involved (Dennis, 2003a).

Box 2.1 Curriculum of a Typical Birth Doula Training Program

- Role and scope of practice of doula care
- Anatomy and physiology of reproduction, labor, and birth
- Ways in which a doula should be prepared to support the emotional and psychological needs of women and their partners during labor
- Comfort measures and non-pharmacologic pain management techniques, including hands-on practice
- The doula's role during a difficult labor
- The first hour of life, including the doula's role involving the newborn and the initiation of breastfeeding
- Referral sources for situations that fall beyond the doula's accepted scope of practice
- Value clarification and communication skills
- Review of certification requirements, ethics, and standards or practice

Training and certification varies by certifying organization, (e.g. Doulas of North America, International, (DONA) ("DONA International," 2005a), Childbirth and Postpartum Professional Association, (CAPPA) ("CAPPA," 2013), Birth Arts International ("Birth Arts International Doula Education," 2012), and International Childbirth Education Association (ICEA) (Gagnon, et al., 1997), although it typically involves a 2- 4 day labor support course, an extensive reading list, evaluations by women and

maternity staff, and work experience as a doula (See Box 1). These trainings can cost up to \$500. There are no regulations in any state requiring that doulas or labor assistants be certified or registered (Lantz, et al., 2005).

2.7 DOULA PRACTICE ENVIRONMENTS AND REMUNERATION

Most of what is known about birth doulas and the way service is delivered and accessed comes from independent and community-based doulas (Breedlove, 2005; Gentry, Nolte, Gonzalez, Pearson, & Ivey; Kane Lowe, Moffat, & Brennan, 2006). Birth doulas may meet and accompany women throughout pregnancy and then continuously during active labor and birth. The prenatal and postpartum component of support varies given the needs and contract between the doula or doula program and the client. Although the scope of a birth doula's practice commonly only includes one or two visits in the postpartum period, this is not part of the typical understanding of birth doula support (which is defined as continuous support during labor and birth). Postpartum doula support is frequently provided by the same birth doula in these models, although there are separate postpartum doulas with a more extensive scope of service. Postpartum doula support is outside the scope of this manuscript. Fees for independent birth doulas range from free to \$1,000, and is often dependent on experience and training (Gurevich, 2003). The number of community-based doulas is also growing. In an accredited community-based model with 50 existing sites in 18 states, doulas who are salaried and supervised accompany women prenatally through the first months postpartum and accompany them into the postpartum ("HealthConnect One," 2011).

Hospital-based doulas account for 1.8% of certified doulas (Lantz, et al., 2005). The survey of certified doulas that provides this percentages does not capture the actual number of doulas given that many practicing doulas are not certified. It is also unclear whether hospitals require certification or provide training for their doulas. One free hospital program defines their doula service as an intervention of social support by lay-women initiated in the prenatal period and continuing throughout labor, delivery and the early postpartum period (Mottl-Santiago, et al., 2008). Additional information about hospital-based programs is generally limited to a few individual programs that have published on the effects of their program for women (Lesser, Maurer, Stephens, & Yolkut, 2005; Mottl-Santiago, et al., 2008) and how doulas interface with nurses (Ballen & Fulcher, 2006).

2.8 BENEFITS OF DOULA SUPPORT

Continuous labor support by a birth doula has both social and economic evidence to validate its importance for healthcare. Women with continuous labor support are more likely to have improved memory and satisfaction with their childbirth experience (Campero, Garcia, Diaz, Ortiz, Reynoso, & Langer, 1998; Hodnett, et al., 2007; Sauls, 2002). Some of the first research focused on increased mother-baby attachment (Kennell, Klaus, McGrath, Robertson, & Hinkley, 1991; Sauls, 2002). Women with continuous labor support have been found to have a reduction in some of the interventions that have been on the rise, including a reduction in cesarean delivery rates, length of labor, need for analgesia, operative vaginal delivery (e.g., use of vacuum

extractor or forceps), and improvements in 5-minute APGAR scores less than 7 and breastfeeding initiation (Hodnett, et al., 2007).

The presence of doulas during birth is associated with a decrease in labor interventions and an increase in women's overall satisfaction with their birth experience (Hodnett, et al., 2007; Kashanian, Javadi, & Haghighi; Langer, et al., 1998; Mottl-Santiago, et al., 2008; Scott, Berkowitz, & Klaus, 1999). A woman's childbirth experience remains with her throughout her life, and the overall experience is an important outcome of labor (Lundgren, 2008). Improvement of a woman's childbirth experience can translate into subsequent postpartum benefits such as mother to baby attachment and breastfeeding initiation (Campbell, et al., 2006; Klaus & Kennell, 1997; Langer, et al., 1998). Continuous labor support is most beneficial in terms of these benefits if the support person is only present to provide labor support (i.e., not also a nurse or midwife), not a member of the woman's social network, and has at least some amount of training and experience (Hodnett, et al., 2012). Despite these documented benefits, doula support is not included in the standard of care within US hospitals.

The evidence for the economic benefits of doula support on outcomes of particular concern to hospitals (i.e. patient satisfaction, healthcare costs, and health outcomes) is fairly new and warrants more attention across contexts and payment models, although initial findings are promising (Chapple, Gilliland, Li, Shier, & Wright; Kozhimannil, et al., 2013). A recent study found that women eligible for Medicaid who had prenatal education and childbirth support from trained doulas resulted in a slight reduction in preterm deliveries, and a 40.9% reduction in cesarean section rates

compared to Medicaid beneficiaries who did not have doula support (Kozhimannil, et al., 2013). The connection between doula support and its economic benefits and as a means to reduce cesarean births, and subsequently cost, has been discussed as problematic, given that this is not the goal of the doula (Morton & Basile, 2013). Additionally, cost savings would depend on state-level factors, rate of cesarean deliveries, and the determined rate of reimbursement for doula services (Kozhimannil, et al., 2013). Economic models have not been able to capture the social and long term benefits of improved maternity care, including doula support (Chapple, et al.; Kozhimannil, et al., 2013). Regardless, this growing economic evidence is one way that doula services are gaining attention in the hospital industry.

2.9 CONCEPTUALIZING DOULA SUPPORT ON HEALTH OUTCOMES

Based on this literature, a comprehensive doula program or complementary theoretical explanations of the pathways of doula support on outcomes is conceptualized in Figure 2.1.

Emotional support refers to the sense of comfort, respect, love, and trust, and that others are ready to take care of the laboring woman and make her feel secure (Campero, et al., 1998; Heaney & Israel, 2008). Cognitive support involves assisting the woman to understand her surroundings and adapt to changes (Campero, et al., 1998); it involves the provision of advice, suggestions, and information that can be used to make decisions (Heaney & Israel, 2008). Material support or instrumental support broadly consists of actions and services (Heaney & Israel, 2008) and for doula social-support this encompasses the physical support measures that the doula provides to assist in pain-

relief and relaxation. Appraisal support assists in allowing the other to self-evaluate. It comes in the forms of constructive feedback and affirmation (Heaney & Israel, 2008).

Specific benefits of **social support** in the form of doula support during labor and childbirth are three-fold:

- 1) *Labor Environment:* Women are uniquely vulnerable to environmental influences during labor; and are specifically sensitive to modern obstetric care environments of institutional routines, high rates of intervention, unfamiliar personnel, lack of privacy and other conditions that may be considered harsh (Hodnett, et al., 2007). This type of environment can have adverse effects on the progress of labor and on the development of feelings of competence and confidence. Doulas can serve as buffers to this environment through cognitive and emotional support, as well as material support in creating an environment conducive to labor.
- 2) *Stress and Mobility:* Anxiety during labor has been shown to increase labor length, and can have adverse effects on the passage of the fetus through the pelvis, as well as an increase in fetal heart rate due to epinephrine in the blood (Hodnett, et al., 2007). Relaxation techniques encouraged by a doula can mitigate this stress response, allowing a woman's body to relax into the labor process, rather than fighting it. In addition to relaxation, encouragement to be mobile and active during labor, and supporting women to assume positions of choice and applicable to certain situations can assist in labor progress, specifically for fetal descent through the birth canal. The interaction between stress and labor progression can be

mitigated by doula labor support, encouragement and suggestion (Hodnett, et al., 2007).

3) *Pain relief*: With the increase in medical interventions during labor, as outlined above as the “cascade of interventions”, one-on-one support providing alternative positions, massage, and natural pain relief techniques, this cascade of interventions can be mitigated or avoided.

Providing social support in its various forms throughout labor and childbirth can profoundly impact birth outcomes and intervention rates, as well as the memory of childbirth which directly influences the long-term and short-term psychological outcomes of the mother. Documentation of women’s experiences and perceptions of their childbirth experience is prolific, indicating that women’s thoughts, feelings and attitudes of their experience effect their perception of themselves as women and as mothers (Campero, et al., 1998). Particularly for first-time mothers, the memory of her childbirth has an enormous lifelong impact on her, whether it be positive or negative (Simkin, 1991). Primary factors in long-term satisfaction of the women include, feelings of control, participation in decisions in their care, as well as the ways in which they are treated by their care-providers. “If she is treated without respect, if her efforts to maintain dignity and control are rebuffed, or if she is taken advantage of, the negative impact is permanent. If she is nurtured, treated with kindness and respect, and feels like a participant, the positive impact is permanent (Simkin, 1991, p. 206).”

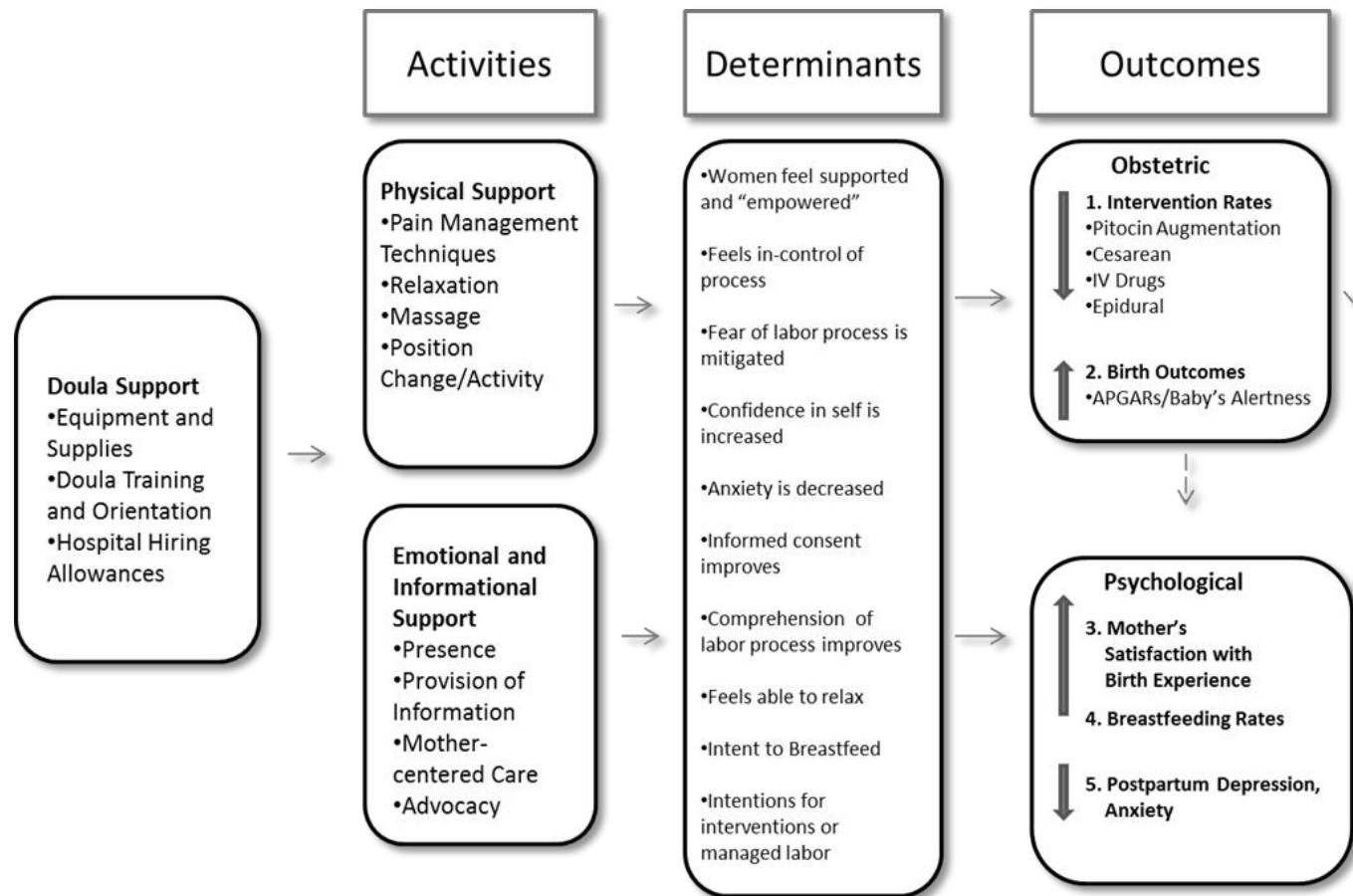


Figure 2.1: Conceptualizing Doula Support on Outcomes

2.10 SIGNIFICANCE OF HOSPITAL-BASED DOULA RESEARCH AT THIS TIME IN HISTORY

Based on the evidence for the benefits of doula support, it is recommended that doula coverage is available for all women (Hodnett, et al., 2012). Hospitals, as the primary setting in which women birth their babies, are well situated to increase access to doula support. At the current moment, most doula support is accessed privately, and as such it remains out of reach financially for many women. The peer-reviewed literature only includes a handful of studies on hospital-based doula programs, it remains to be known what hospitals are doing in terms of service delivery and how they are framing and understanding doula care. Expanding doula coverage through hospitals could ultimately advance the benefits of doula support for more women.

The US is in the midst of healthcare reform; this is an opportune time to consider improvements in labor and delivery care for women, babies, and families. In March of 2010, Congress passed the Patient Protection and Affordable Care Act (PPACA), which puts in place comprehensive health insurance reforms that focuses on four primary objectives, 1) to hold insurance companies more accountable by putting consumers back in charge of their health care and enforcing a new “Patient’s Bill of Rights” which protects people from insurance eligibility restrictions, among other limitations often practiced by insurance companies, 2) to lower healthcare costs, 3) guarantee more healthcare choices, and 4) enhance the quality of healthcare for all Americans (“About the Law”, 2011). Attention to the component *health insurance for all* is the critical first step for reform to the US healthcare system; lowering healthcare costs is not separate from this emphasis. What the PPACA does is set up an agenda that shifts the emphasis

of the current healthcare system, which is primarily a profit-driven system controlled and manipulated by insurance companies, to a system that refocuses the healthcare system on the recipient of care, that is populations, individuals, families, and the greater community. This drastic shift in thinking will not happen overnight; the PPACA is implemented through a series of stages. Smaller initiatives, such as hospital-based doula programs, within organizations have the potential to stimulate this value shift within labor and delivery care within individual hospitals, which can then translate up into systems level change.

Specifically women will benefit from Medicaid expansion through the PPACA. Nationally in 2006 Medicaid covered 42% of women's childbirth-related hospital stays across the nation (Center for Best Practices, 2011). With the new provisions within PPACA to start in 2014, it is estimated that 8.2 million women younger than 65 will have the potential to be added to the Medicaid program (Sakala, 2013). This is a significant change, especially for states with higher percentages of Medicaid births. Cost-saving healthcare measures are critical during this time of healthcare reform, which emphasizes expanding coverage for all Americans and reducing healthcare costs.

Christine Morton takes the humanistic view of childbirth indicates that doulas are an embodiment of the humanistic element of supportive care within hospital-based childbirth, and as such have the "potential to contribute to the reform of U.S. maternity care (Morton, 2014, p. 293)."

The doula model of care places the childbearing woman at the center, as an agent of her birth experience and also as the subject of the doula's role.

Homebirth midwives also view birthing women as autonomous agents, but doulas move this model, albeit with less power over clinical care management, to the hospital (Morton, C. H. & Clift, E.G., 2014).

Hospital-based doula programs are well situated as examples of programming efforts to improve maternity care for women and reduce labor and delivery costs within the hospital environment. The climate of healthcare reform provides a platform for programs like these to gain attention in their successes and experiences regarding change at the organizational level. Ultimately for healthcare systems change, and a value shift, change must happen within the organizations that provide healthcare for the population. This research considers this larger issue within the context of labor and delivery care for women and asks the question: What does it take for innovative programs or services, specifically doula programs, to be adopted into hospital labor and delivery environments? More specifically how do programs originating out of holistic and humanistic women-centered care philosophies engage with and begin to change hospital environments that typically operate under the predominant technocratic model of medicine?

Investigating the implementation and reception of hospital-based doula programs is an important process to understand in the context of larger efforts to reform birthing environments. The first step in this process of integrating doula-based services into hospitals is understanding what doula service delivery entails and how it is understood and championed by individuals that initiate the service and ultimately come to be supported by the hospital institution. This example of the initiation of doula

support as part of hospital services is an example that will provide insight into what it takes to introduce change and innovation within the hospital system, typically a hierarchical institution strongly influenced by the payers and directives of care.

2.11 STUDY AIMS

The overall goal of this study was to investigate how innovations, such as hospital-based doula programs, are incorporated into hospital institutions by examination of the subsequent aims:

1. Identify factors and decisions involved in the adoption of hospital-based doula programs across the United States.
2. Describe the scope and services of US hospital-based doula programs including, doula training, contractual relationships of doulas with the hospital, cost to women, how doulas are connected with women, and the scope of doula commitment.

Research questions included:

1. What are the service delivery models of hospital-based doula support?
2. Who is involved with hospital-based doula program initiation?
3. Why is doula support initiated?
4. How is the introduction of doula services into the hospital achieved and maintained?

CHAPTER 3

METHODS

The research aims of this qualitative, descriptive study was to 1) identify factors and decisions involved in the adoption of hospital-based doula programs across the US, and 2) examine the scope and services of US hospital-based doula programs including, doula training, contractual relationships of doulas with the hospital, cost to women, how doulas are connected with women, and the scope of doula commitment. Qualitative methods are appropriate when little is known about the context of study, or for emerging areas of research (Maxwell, 2005). They allow the researchers to capture the layers of variation and meaning often missed in quantitative research (Maxwell, 2005). As this is one of the first studies to attempt to comprehensively review hospital-based doula programs, we employed a relatively unstructured approach, despite the advantages of pre-structured studies that reduce the amount of data collected (Maxwell, 2005). The initial plan and frameworks proposed was designed to be flexible to change as information about the topic emerged (Glesne, 2011; Maxwell, 2005).

3.1 Researcher Position and Reflexivity

The research aims were in part informed by my personal experience as a birth doula in both the independent and hospital-based setting. Although I was not employed as a doula during the course of this research, prior to the commencement of the research study and birth of my first child, I was a staff doula at a local hospital-based

doula program for three years. During the data collection and analysis phase of the research, I was practicing as an independent doula, certified through Doulas of North America (DONA International).

I assembled a dissertation committee that had the expertise needed to successfully complete the research: Dr. Edward Frongillo has a policy-science background and extensive experience working in a variety of settings across disciplines, Dr. Deborah L. Billings works in the field of women's health advocacy and research, Dr. DeAnne K. Hilfinger Messias offered experience bridging the gap between women's studies, nursing, and public-health research, and Dr. Erica Gibson conducts anthropological studies of birth.

Further preparation for this dissertation endeavor included a mentored research course with one of the committee members, Dr. DeAnne K. Hilfinger Messias. During this course we developed and piloted an interview guide, conducted two interviews, and transcribed the interviews. Together, I and my faculty mentor coded the transcript for themes and reviewed it for value in the way questions were asked and understood by the informant. This helped to prepare me for issues to be sensitive to throughout data collection; it also provided an opportunity to practice for data collection for the larger dissertation endeavor.

3.2 Methodologies

The first part of the research follows social constructionism rather than materialistic truth inquiry (Shiffman, 2009). Social constructionism emphasizes the importance of ideas in understanding the world and social processes. The second part

of the research takes a more materialist perspective in that we sought to examine the facts and components of the programs. In addition the topic of this research, doula support – women supporting women, is an inherently feminist issue. As Jaggar (2008) noted,, “Good feminist research is its commitment to gender equity and empowerment” (Jaggar, 2008, p.x). Doulas are sought by women in the U.S. because of some of the concerns that women have about the context of childbirth, and the doulas objective to seek to support a mother so that she feels safe, confident and empowered in her own ability throughout the process of labor and birth. Given this focus and my own connection to the research we drew upon feminist methodology throughout the research process.

We did this by first considering asymmetrical power arrangements. “Inequality is embedded within and reinforced by society, by popular culture, government, and political processes; in organizations and corporations” (Jaggar, 2008, p.xi). As part of the knowledge production process we were attentive to the data for elements of power, and how the doula program, may in fact not be able to disentangle itself from institutionalized hierarchies of power within hospital systems. Second, our intention for the research from the outset was for it to be useful and informative for hospitals that seek to offer innovative programs such as doula programs into hospital obstetrics.

3.3 Conceptual Frameworks

Multiple frameworks were used to situate the content of the study, development of data collection tools, and ultimately for data analysis. Implementation and policy research frameworks were used to describe the stages of adoption and

implementation, and help explain the drivers of adoption and organizational facilitators of implementation (Clark, 2002; Fixsen, Naoom, Blase, Friedman, & Wallace, 2005; Shiffman, 2009; Shiffman, J. & Smith, S. , 2007; Zazzali, Sherbourne, Hoagwood, Greene, Bigley, & Sexton, 2008). Concepts across these frameworks were helpful in designing the research questions, developing data collection tools, and in analysis of the data.

Typically implementation research focuses on the process of implementation of the same evidence-based program in a variety of settings. This process consists of four major stages, although this is a dynamic process, including adoption and installation, implementation, innovation, and sustainability (Fixsen, et al., 2005). While evidence supports the benefits of doula support for mothers, babies, and healthcare costs, a packaged evidence-based program does not exist. Each hospital identified for inclusion in this study developed hospital-based doula services uniquely and designed the program for the particular context of that hospital. Given this, the research emphasized the front end of program implementation processes, that of initiation and adoption of innovations. We understood doula service to be the innovation.

The first stage of implementation, adoption and installation, draws upon the diffusion literature (Rogers, 1983), and begins when someone at the institution is thinking about an innovation; identification of a particular innovation also happens in this stage. Adoption occurs when support has been gained among the larger decision makers in the institution and a decision has been made to implement the chosen innovation (Fixsen, et al., 2005). The development and initiation of innovations, defined as any new idea, be it a service, program, product, or policy that includes the process of

developing and implementing that idea into an organizational setting, has been tested and modified within a variety of fields; health services, health promotion, education, policy sciences, organizational development, and technological innovations (Greenhalgh, Robert, Macfarlane, Bate, & Kyriakidou, 2004; Van de Ven, Polley, Raghu, & Venkataraman, 2008). How innovations and policy decisions emerge is difficult to explain, given the dynamic nature of the process (Walt, Shiffman, Schneider, Murray, Brugha, & Gilson, 2008). Frameworks that address agenda setting, often the first stage in the public policy process, help us understand the emergence of issues and how they garner attention and priority by policy makers (Heidbreder, 2012; Pelletier, Frongillo, Gervais, Hoey, Menon, Ngo, Stoltzfus, Ahmed, & Ahmed; Shiffman, 2009; Shiffman & Okonofua, 2007; Shiffman, J. & Smith, S., 2007; Walt, et al., 2008).

Conceptual Framework

We used Shiffman's (2009) social constructionist explanation that consists of three general factors: policy communities or actors, ideas, and institutions to understand the emergence of hospital-based doula programs. At the heart of this framework and others are the individuals involved with initiating and developing innovations or policies. These individuals come with their perspectives derived from their values (Shiffman, 2009). These individuals are called actors in the policy sciences literature and purveyors in implementation literature. For clarity and usefulness to a wide audience we described these actors as key personnel involved with initiation and development of the program. Several aspects of the key personnel involved in this research were investigated; 1) how they understood and portrayed the issue (Shiffman,

J. & Smith, S. , 2007) and 2) their perspectives involved with the issue (Clark, 2002). These perspectives are shaped by how individuals identify, what they want (i.e., demands), and what they expect (i.e., assume) (Clark, 2002). We referred to the eight values that Clark discusses to identify values relevant to the claims that individuals made about doula support. The eight base values that Clark puts forth are power, enlightenment, wealth, well-being, skill, affection, respect and rectitude (Clark, 2002, p. 34). The four that we ultimately used to understand the data are wealth, which is to have money, well-being, which is to have health, respect, which is to show and receive deference, and power, which is to have participation in decision making (Clark, 2002, p.34).

Individuals are also influenced by their experiences and relationships they have with other members of the birth team (Warshawsky, Havens, & Knafl, 2012). These perspectives shape how individuals view issues and ultimately portray them (Shiffman, J. & Smith, S., 2007); innovations are perceived differently by different audiences (Kennedy & Fiss, 2009; Shiffman, 2009; J. Shiffman & S. Smith, 2007). Embedded within a social constructionist paradigm is emphasis on how the actor community for the issue perceives and portrays the public health issue, rather than any objective sense (Clark, 2002, p.24; Shiffman, 2009, p. 608).

Shiffman (2009) distinguished between ideas and institutions. He considered the ideas and how they are understood are critical to garnering attention, but these ideas must be supported by the institution in order to be established and sustained, as the institution has control over the allocation of resources towards innovations (Shiffman,

2009) and often include socioeconomic considerations (Heidbreder, 2012; Kennedy & Fiss, 2009). Shiffman's framework guided the analysis of the first aim that sought to understand the emergence of hospital-based doula programs.

3.4 Methods

Recruitment

First, we identified 50 hospital-based doula programs via an internet search using terms such as "hospital", "doula," [state name]" and snowball referrals. We reviewed the available websites for 34 programs. We excluded 6 programs no longer in existence and 4 programs not currently affiliated with a hospital. (See Figure 3.1).

The aim of the review was to identify program characteristics and gather publically available information about how pregnant women access the doula services offered through the hospitals. Using purposive and snowball sampling, we contacted potential key informants from 40 hospitals to participate in telephone interviews. The intent of purposive sampling was to obtain a heterogeneous sample that allowed for both high-quality, detailed descriptions of each case, and important shared patterns that cut across cases and derived their significance out of heterogeneity (Creswell, Chapter 5). Others explain this as a means to create maximum variation (Glesne, 2011; Maxwell, 2005). Because little was known about hospital-based doula programs, we did not have specific criteria or definitions of sample variation and therefore included all identifiable programs.

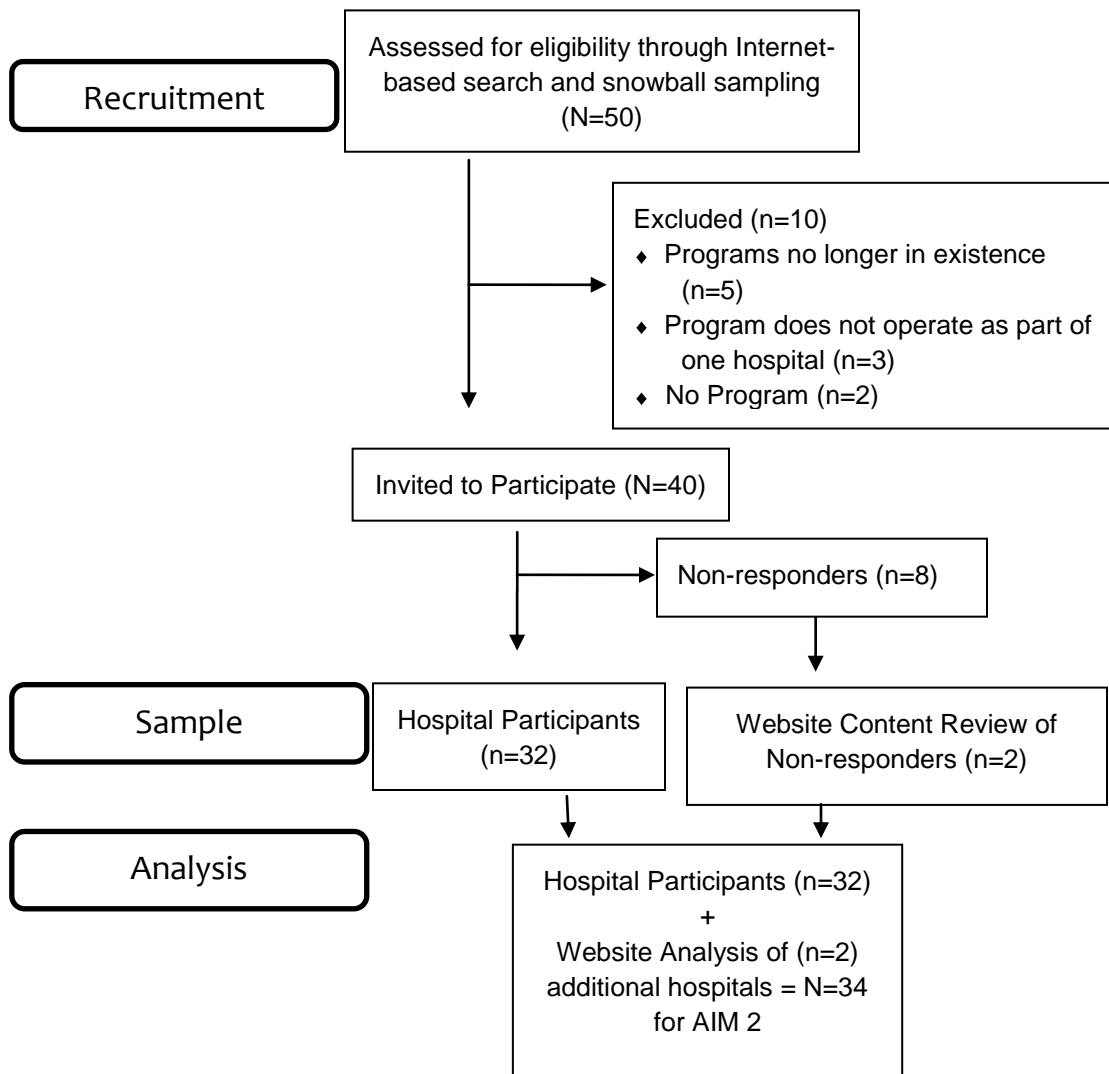


Figure 3.1: Sample Recruitment and Data Collection Flow Chart

Enrollment

The University of South Carolina Institutional Review Board approved the research prior to data collection. (See Appendix A for Approved Informed Consent Documents). We contacted doula program coordinators at 40 hospitals through email and telephone; 32 contacts agreed to participate in the survey (80% response rate); 2 had sufficient enough websites that they were included in the sample for the second

manuscript. After 3 contact attempts, we excluded the remaining 6 programs from the sample. In extending the invitation to participate in the study, the researcher informed participants of the confidential nature of the interviews.

Sample Characteristics

Participants (n=38) included hospital staff and volunteers overseeing the doula program (n=32), program developers (n=2), lead doulas (n=3), and a product manager (n=1). Of those interviewed, 25 were involved with the doula program at the beginning, and 14 of these 25 individuals were directly part of program initiation.

Most (n=25) doula program coordinators had additional positions within the hospital (e.g., Clinical Care Supervisor, Director of Obstetrics/Women and Children's Services/Perinatal Education, Labor and Delivery Nurse Manager, Nurse, Perinatal Educator, Lactation Consultant, Midwife). All but 3 participants were a doula program director or coordinator or one member of co-coordinators. The three exceptions were a senior doula who has been with the program since its beginning, two women that oversee the doula coordinator (i.e., Supervisor for Parent Education and a Volunteer Coordinator). Not all coordinators were doulas. With the exception of one male involved in the overall hospital-maternity improvement initiative, all were women; participants self-reported race was white (n=29), Hispanic (n=1), and not reported (n=2).

Data Collection

Key Informant Interviews

Qualitative interviewing lends itself well to this research as it allows for in-depth understanding of 1) the meaning, for participants in the study, of the events, situations, experiences, and actions they are involved with or engage in, 2) the context within which the participants act, and the influence that this context has on their actions, and 3) unanticipated phenomena and influences, as it has an inherent openness and flexibility (Maxwell, 2005). Qualitative research allows for evolution throughout the data analysis and collection process (Crabtree & Miller, 1999). This flexibility was countered by rigorous and methodical attention to record keeping, particularly in the form of reflections and field notes.

We audio-recorded the semi-structured phone interviews using CallTrunk for iPhone. The interviews averaged 46 minutes in length. The interview guide (Appendix B) incorporated concepts related to program implementation and adoption and included: program structure, history, reception by hospital providers, successes, and challenges (Clark, 2002; Fixsen, et al., 2005; Shiffman, J. & Smith, S. , 2007; Zazzali, et al., 2008). Conversational probes encouraged open, reflective, and detailed descriptions of respondents' experiences and opinions related to the topic (Maxwell, 2005). We added additional questions and made minor modifications to the interview guide based on emerging themes identified during data collection (Glesne, 2011). The primary researcher and professional transcriptionists rendered the audio recordings into written

text. We entered the qualitative data into NVivo 10 data management software (QSR, 2012).

Data Analysis

Analysis Process

We first conducted an auditory review of each interview; during this process sections of the interview were organized by topic domain (Crabtree & Miller, 1992, 1999, p. 135). During this initial auditory review, notes were made of thematic content. Formal coding of the qualitative transcript data then proceeded using categorical and *a priori* codes taken from interview guides; emergent themes within categories were added (Maxwell, 2005).

We conducted a purposeful content analysis across both research aims. To do this, we first organized the data into categories based on the interview guide (i.e., history of program, who started program, key facilitators), often described as the editing organizing style or deductive coding (Bradley, 2007; Miles and Huberman 1994). From within these categories relevant to the research question, we coded the data to identify conceptual domains, or sub-codes (e.g., prior experience, philosophical belief, grant initiative, support particular groups of women) (Bradley 2007). For the first manuscript, these conceptual domains were then organized within the concepts of actors, ideas, and institutions per Shiffman's framework for understanding the emergence of issues (Shiffman, 2009). For example, within the responses in the category "motivations for starting the program", we identified several major conceptual domains such as "prior experience, philosophical belief, grant initiative, support particular groups of women."

These themes were then thought about in relation to Shiffman's framework of actors, ideas, and institutions (Shiffman, 2009). We also utilized the values that drive decisions in social processes discussed in Clark (Clark, 2002) as a tool to tease out the values underlying individuals' or actors' claims about doula support.

We verified our conclusions by tabulating responses by program and re-coding the data, to visually place overlapping categories together, and to identify particular quotes that highlighted nuances by program. We used NVivo 10 to manage the qualitative data; compiled and analyzed categorical and numerical data using Excel (QSR, 2012).

3.5 Credibility and Trustworthiness of the Data

Tong and colleagues developed 32 consolidated criteria for reporting qualitative studies (COREQ) in 2007, described within 3 domains of research team and reflexivity, study design, and analysis and findings (Tong, Sainsbury, & Craig, 2007). Using some of the criteria within these domains, I describe the actions taken to ensure data credibility and trustworthiness in this work.

Domain 1 - Research Team and Reflexivity

Throughout the data collection process, we noted themes and thoughts related to interviews in the form of field notes and also periodically, and the primary researcher noted personal biases through reflexive memos to ensure trustworthiness of the data (Glesne, 2011). This process of reflexivity aided in revisiting and reframing questions in an iterative and simultaneous data collection and data analysis process (Stewart & Cole, 2007). For example, I started out with initial ideas about doula support from my own

experience that influenced development of the interview guides, these ideas were then shaped throughout the process of interviewing as I learned about each program. I periodically returned to previous interviews as an attempt to give equal weight to all respondents, not just the most recent.

Domain 2 - Study Design

The details of the study design were discussed above. Briefly, this was a qualitative study that employed purposive and snowball sampling. The first part of the research follows the line of social constructionism as discussed in the frameworks in Chapter 2. The intention of the second part of the research was to describe service delivery models of hospital-based doula services. All hospital-based doula programs were targeted and approached via telephone and email on multiple occasions. There was an 80% response rate. Little is known about the programs that did not participate. One of the programs not included in the second manuscript was distinct from the majority of those included in analysis in that it was a fee-for-service program that charged \$750 to women to have a doula.

Domain 3 - Analysis and Findings

I conducted the majority of the qualitative data analysis. Through the iterative process of writing up the results, committee members posed questions, comments and reflections that required re-examination of the data on multiple accounts. This re-visiting of the data increased my confidence that the results presented reflect the data. Wherever possible I used quotations and description of the informant in the presentation of the results so readers can make their own conclusions from the data,

made efforts to summarize the data into general themes and categories, and highlighted variations within themes to ensure the findings are applicable to practice. In the following chapters I present the findings of the research, formatted into 2 manuscripts.

CHAPTER 4

MANUSCRIPT 1

The incorporation of doulas into U.S. hospital maternity services: A social constructionist explanation¹

Introduction

Labor and birth outcomes among women in the United States (US) are not optimal despite widespread prenatal care, access to life-saving technology, and the cost of maternity care ("HRSA MCH Programs; Amnesty, 2010). The US ranks 50th in the world in maternal mortality, the prevalence for which is even greater in marginalized groups including racial and ethnic populations, immigrants, and women living in poverty (Amnesty, 2010). Particularly within maternity care, social and peer support are examples of recent improvements and innovations, aimed at improving psychosocial health and general wellbeing (Dennis, 2003a; Hogan, Linden, & Najarian, 2002; Reblin & Uchino, 2008; Sobel, 1995). Since the 1960's efforts of the women's health movement healthcare has gradually seen a shift from disease-prevention to health promotion (Dennis, 2003b; Sobel, 1995). Efforts to improve social support during the perinatal period include group prenatal care, peer support in the form of community-based doulas throughout pregnancy and for breastfeeding, WIC breastfeeding peer-

¹ Beets, V.D., Frongillo, E.A., Hilfinger Messias, D.K., Billings, D.L., Gibson, E. To be submitted to *Health Services Research*.

counselors, Nurse-Family Partnership, Strong Start for Mothers and Newborns Initiative, social support for women birthing terminal babies, and our example here of hospital-based birth doula support ("HealthConnect One," 2011; Campbell, Wan, Speck, & Hartig, 2014; Ickovics, et al.; Kozhimannil, et al., 2013; Langer, et al., 1998; Mottl-Santiago, et al., 2008; Picklesimer, et al., 2012; Sauls, 2002).

Birth doulas provide continuous emotional, physical, and informational support to women before, during, and just after childbirth ("DONA International," 2005b). The role of the birth doula is to protect the laboring and birthing environment so that women feel supported and encouraged throughout the laboring and birthing process (Meyer, et al., 2001). In the US, the majority of certified doulas practice independently (79.9% individual practice) rather than as part of collaborative businesses (19.8%) in community-based practice (1.8%), or associated with a hospital (1.8%). Formal incorporation of doula care within hospital maternity services is a fairly recent phenomenon (Bromberg Bar-Yam, 2003; Lantz, et al., 2005).

Doula care and its central principle of social support for a woman during childbirth is emerging in part because women are not receiving this type of support or care in the hospital setting. One-on-one support historically was central to maternity care and particularly in the nursing profession (Green, et al., 2007; Leslie & Storton, 2007). This has been de-emphasized and frequently de-valued through the transition of birth from home to hospital, which has marked an increase in health care costs, medical specialization and technology, shortened hospital stays, and reduced interpersonal communication between health professionals and their clients (Dennis, 2003a). The

growth in the presence of doulas at the bedside is in part bolstered by the benefits associated with doula support which include: reduction in interventions and labor length and improvement in women's satisfaction, memory of her childbirth experiences and emotional health.

The formal incorporation of the doula into hospital maternity services is a systems innovation. The development and initiation of innovations (i.e., doulas), defined as any new idea, be it a service, program, product, or policy that includes the process of developing and implementing that idea into an organizational setting, has been tested and modified within a variety of fields: health services, health promotion, education, policy sciences, organizational development, and technological innovations (Greenhalgh, et al., 2004; Van de Ven, et al., 2008). How innovations emerge is a dynamic process (Walt, et al., 2008). Frameworks that address agenda setting help us understand the emergence of issues and how they garner attention and priority (Heidbreder, 2012; Pelletier, et al.; Shiffman, 2009; Shiffman & Okonofua, 2007; Shiffman, J. & Smith, S., 2007; Walt, et al., 2008). Examination of how this social support service, doula support, is institutionalized provides an important opportunity to understand how innovations that introduce a new member into clinical care teams are introduced and mainstreamed within hospital settings.

Research Purpose

The research aim was to identify, describe, and analyze the actors, ideas, and institutions involved in the incorporation of doulas into hospital maternity services. Specifically, we investigated the growing interest in doula services within US hospitals,

specifically the individuals involved with program initiation, and the ideas that drove doula program adoption by these hospital personnel and organizations to incorporate doulas into maternity care. We used Shiffman's (2009) social constructionist framework as a guide to interpret our analysis of the formal incorporation of an innovation (i.e., doulas) into hospital maternity service in the US. We identified the key personnel involved with program initiation and development, described the ideas and ways doula support was framed, and how the institution (i.e., hospital) understood the idea and came to support it. A social constructionist paradigm is appropriate to use for this topic, given that these programs are new and uniquely developed within each hospital context. This innovation is also fairly young in terms of its placement along the continuum of program lifecycles as understood in Rogers Diffusion of Innovations. In the following section we provide an overview of the theoretical framework and then describe the research methods, including an overview of Shiffman's (2009) theoretical framework used in analysis.

Methods

We surveyed doula program coordinators at 32 U.S. hospitals, inquiring about program history and implementation. We purposively analyzed the data based on Shiffman's social constructionist framework. The study protocol was approved by the Institutional Review Board at the University of South Carolina.

Recruitment and Sample

We identified 50 U.S. hospital-based doula programs via an internet search and snowball referrals. We excluded 6 programs no longer in existence and 4 programs not

currently affiliated with a hospital. We contacted doula program coordinators at the 40 eligible hospitals through email and telephone; 32 contacts agreed to participate in the survey. After 6 contact attempts, we excluded the remaining 8 programs from the sample. Programs (n=32) clustered regionally, 10 in the Pacific, 7 in the Northeast (NE), 8 in the Midwest (MW), 3 in the South, and 4 in the Southwest (SW). Nineteen of the programs were volunteer programs, and 13 employed staff and/or contracted with doulas.

All participants, with the exception of three, were done with a doula program director or coordinator or one member of co-coordinators. The three exceptions were a senior doula who has been with the program since its beginning and two women that oversee the doula coordinator (i.e., Supervisor for Parent Education and a Volunteer Coordinator). Not all coordinators were doulas. All were women, except one male involved in the overall program management (of which doulas were a part). The racial and ethnic distribution was: Caucasian (n=29), Hispanic (n=1), and unknown (n=2).

Four coordinators shared the responsibility as co-coordinators. Seven coordinators did not have additional positions within the hospital. Doula program coordination was one of many roles for 21 doula program coordinators (e.g., some perinatal educators were also nurses or former nurses, a Nurse-Midwife was also a Clinical Professor, a Clinical Care Supervisor was also a nurse).

In a couple of instances, coordinators took on doula program coordination because of budget cuts that eliminated the former doula coordinator. Others inherited the role with their position. When a coordinator had multiple responsibilities, it was not

uncommon for a doula to assist with scheduling and other program activities. Twenty-six were paid doula program coordinator positions. Six were volunteer doula program coordinators.

Data Collection

We conducted 38 audio-recorded semi-structured phone interviews (average length 46 minutes) with 32 program coordinators or directors, 3 lead doulas, and 2 program developers from 32 hospitals. One of these interviews was a conference call with 3 individuals from one program; the remaining 35 interviews were conducted separately. Of those interviewed, 25 were involved with the doula program at the beginning, 14 of these 25 were directly part of program initiation. (See Figure 4.1).

The interview schedule incorporated concepts related to program adoption and implementation that 1) describe the stages of implementation and 2) explain the drivers of adoption and organizational facilitators of implementation (Clark, 2002; Fixsen, et al., 2005; Shiffman, J. & Smith, S. , 2007; Zazzali, et al., 2008). Concepts included: contemplation of innovation, identification of a particular innovation, gathering support among decision makers, and decision to implement (Fixsen, et al., 2005). Conversational probes were asked throughout to encourage open, reflective, and detailed descriptions of respondents' experiences and opinions related to the topic (Glesne, 2011; Maxwell, 2005). Modifications and additional questions were added to the interview guide as themes emerged in the interviews (Glesne, 2011; Maxwell, 2005). Other survey questions included description of services, funding mechanisms, workplace reception, and successes and challenges.

The lead author and professional transcriptionists rendered the audio recordings into written text. We used NVivo 10 to manage the transcripts (QSR, 2012).

Data Analysis

We conducted a purposeful content analysis guided in part by Shiffman's (2009) framework. This social constructionist framework was developed to understand the processes of how public health issues garner political priority, and consists of actors or policy communities, ideas, and institutions (Shiffman, 2009). At the heart of this framework are the individuals involved that come with their perspectives derived from their values (Clark, 2002, p. 38; Shiffman, 2009). Perspectives shape how individuals view issues and innovations and ultimately portray them (Kennedy & Fiss, 2009; Shiffman, 2009; Shiffman, J. & Smith, S., 2007). Embedded within a social constructionist paradigm is emphasis on how the community perceives and portrays the public health issue, rather than any objective sense (Clark, 2002, p. 24; Shiffman, 2009, p. 608). Hospitals consist of a variety of actors, within fairly visible hierarchies; we use the terms key personnel or individuals rather than actors. Hospital personnel have entered the field of hospital administration, healthcare, medicine or more directly women's healthcare via a variety of channels and with an original intention or personal value behind their interest(s).

Shiffman (2009) distinguished between ideas and institutions. Ideas and how they are understood are critical to building support for an issue, but these ideas must ultimately be supported and/or developed by institutions in order for sustainability, as the institution has control over the allocation of resources towards innovations

(Shiffman, 2009). The emergence of issues and subsequent development of policy and innovations are driven in part by personal preferences and values (Clark, 2002). We referred to the eight values that Clark discusses to identify values relevant to the claims that individuals made about doula support. The eight base values that Clark put forth were power, enlightenment, wealth, well-being, skill, affection, respect and rectitude (Clark, 2002, p. 34). We incorporated four of these into the data analysis: wealth (expressed here as economics), which is to have money; well-being, which is to have health; respect, which is to show and receive deference; and power (expressed here as autonomy of women), which is to have participation in decision making (Clark, 2002, p.34).

To analyze the data, we first organized the data into categories based on the interview guide (i.e., history of program, who started program, key facilitators), often described as the editing organizing style or deductive coding (Glesne, 2011). From within categories relevant to the research question, we coded the data to identify conceptual domains or sub-codes (e.g., prior experience, philosophical belief, grant initiative, support particular groups of women) (Glesne, 2011). These conceptual domains were then organized within the concepts in Shiffman's framework (2009).

We verified our conclusions by tabulating responses by program and re-coding the data, to visually place overlapping categories together, and to identify particular quotes that highlighted nuances by program. Trustworthiness of the data was also assured through peer-review, reflexive memo-writing, in-depth description of the

results when possible, and presentation of negative cases and variations across the results.

Results

In presenting the findings, we first identify the actors or key personnel involved with initiating doula services within the hospital. We then we discuss ideas, or the claims about doula support and its intended effects on outcomes and practices. In the final section we discuss the processes through which programs were initiated and sustained.

Key personnel for initiation and implementation

Respondents indicated the majority of these 32 hospital-based doula programs were initiated by personnel within hospital maternity care. Initiation occurred in two ways, through individuals that championed the idea (n=28) and through committees or groups (n=4). Doula services originated from clientele, women who could potentially access the service, in only one instance. This was achieved through focus groups conducted by a nursing manager.

Table 4.1 presents pathways of development by first presenting who initiated doula services, followed by who realized this vision through program development, and then additional supporters necessary to obtain clearance and general support garnered for program development (i.e., approval from the VP and board of directors, marketing efforts around program development). While many of those that initiated programs were intimately involved in program development, it also happened that another facilitator was chosen to develop the program. This discrepancy was reflected in

hierarchical positions that individuals held. For example if a CEO or Director of Obstetrics initiated the idea, another individual, frequently a nurse and/or childbirth educator was chosen to actualize the program. If a nurse and/or childbirth educator championed the idea, they most likely carried out program development themselves. The effort was widely driven and carried out by nurses, childbirth educators, and midwives.

Ideas: What concepts and values underscored the initiatives?

Personnel that initiated the idea of doula support did so for a variety of reasons. These reasons were reflected in the claims made about doula support. Others had prior experience with a hospital-based doula program in another location (n=1, resident OB), responded to the competence of an independent doula (n=2, physician, nursing director), read about it in a book (n=1, physician as part of committee), saw another hospital offering the service as part of family-centered maternity care (n=1, VP) or went to a training for childbirth education and was exposed to the idea (childbirth educator n=1). Programs initiated by committees represented all four values. For example, one committee-initiated program was about respect, another about economics, another about autonomy, and another about the well-being of women. Often more than one value was represented within one program.

Claims and values regarding cost, quality, and safety

Participants addressed quality, cost-effective, and safe maternity care in different ways, laying claim to different aspects of doula support as they promoted and gathered support for organizational adoption. Program developers claimed that doula

support enhanced patient satisfaction related to birth experience, reduced complication rates, was a marketplace opportunity, and was an important component of quality maternity care. They also asserted recognition that women need additional hands-on support, women deserve autonomy over their healthcare, and cultural and linguistic factors should be respected during the labor experience (see Table 4.2). Doula support was developed as a mechanism to meet these objectives, either as a means to advance outcomes for women directly or to influence practices within the institution.

Anticipated outcomes influenced by doula support included improvement in patient satisfaction and memory of childbirth and reduction of complication rates. Hospital practices included provision of alternate sources of labor support, fostering women's autonomy, intentional incorporation of doula services into medical model of labor management, tailoring hospital practices to cultural and linguistic needs of diverse women, expanding doula services beyond private pay, increasing clientele, and enhancing family-centered maternity care.

The values of well-being, respect, autonomy of women, and economics, as defined by Clark, emerged from these claims (Clark, 2002). Coexistence of these values occurred frequently, and was represented in programs that were both volunteer and paid doula program models. We identified few distinctions among those who made the claims and the values represented, especially as more than one value was connected with each program. We indicated the position(s) of the individual making the claim, to further contextualize the result.

Maternal Well-being

Maternal well-being, described as the health and comfort of birthing women, was the most reflected value in the decision to initiate doula support among programs staffed by paid and volunteer doulas. Indicators of maternal well-being included length of labor, intervention rates and breastfeeding initiation, as well as improved emotional health, memory of childbirth, and satisfaction with their childbirth experience. One volunteer program developer, also a nurse, indicated her understanding of how doula support could improve maternity care for low-risk women:

What did not make sense to me as a nurse was viewing that women who had normal health histories and normal obstetric histories would come in and have a high complication rate at this hospital. And what I finally determined was these women were laboring without support. And, I dreamed up this idea that we needed to do a program.

This program was a free service to women and is provided by volunteer doulas. At another hospital, the Director of Obstetrics, who was a midwife, started a doula program at no charge to women, although the hospital hires the doulas. The rationale for providing doula support free of charge was that “...labor support is one of the most significant indicators of how you’re going to feel after the birth...[and I] wanted it to be available for all women.”

Respect

Respect is manifested as recognition, freedom of choice, and equality of individuals (Clark, 2002). The addition of doula support to maternity services, and

taking away the cost of independent doula care to women, improves the overall care a woman receives and brings high-quality care and practices within reach to populations that would otherwise be unable to access doula support. One participant summed the importance of respect for all women: *“If you have a paid doula and they can’t afford it you’ve taken that service out of reach to them. So this makes it ideal for people who are interested in a doula or perhaps don’t have money to have a paid doula.”*

Other participants emphasized that offering doula services free of charge to women (whether or not the doulas were paid or volunteer) was important if doula services were to be extended beyond private pay. In particular, they emphasized the intent to support underserved populations, including women with little social support, low socioeconomic status, at-risk to receive little or no prenatal care, non-English speakers, women from a different culture, and women experiencing perinatal loss. One program was started by midwives at a small community hospital that serves women

from all over the world some are recent immigrants and some are not... [has] a philosophy that when you go into labor, whatever your mother tongue was, its going to come back ... when you go into labor and that should be honored....Women should feel safe in a basic way and language has a lot to do with that and culture is a piece of that.

Another program with contracted doulas

was started because the hospital...served a lot of Spanish speaking patients and it was, I think, really created to bridge the language and culture gap between the patients and the caregivers. So instead of using a translation phone or stumbling

through the translation, doulas were hired to [interpret] ...to be a patient advocate and then to do labor support also.

Increasing Women's Agency

Part of the doula's work is to support the autonomy of women to choose and be agents in the direction of their care. Participation of women in the decision-making of their care was mentioned by several actors (n=3), but it was not a commonly stated reason for initiating the doula program. One program was started because *"we had an LD [Labor and Delivery] nurse that felt very strongly about letting women do what they would like to do in their labor rather than it being a medical procedure."* The director of a free program to women provided by contracted doulas indicated the importance of options for women: *"Our motto for our patients is 'options'. We want their birth plan to be their birth plan. If there is an option of a choice that they want, then we want it to be available to them."* Similarly, the coordinator of a volunteer program also suggested the importance of choice for women during labor, while also indicating an intentional incorporation of doula services into the medical model of labor management:

Currently, the work I'm doing is really introducing (doula support) into the medical model – bringing doula care into the scenario. Not only for the woman and her partner, but it is also support for the nurses and the providers that they've chosen, and helping hospitals stay ahead of the learning curve...where they have this option they present to women.

Program advocates viewed provision of options for women in terms of both women's autonomy and a hospital marketing strategy. They viewed doula support as

contributing to women's autonomy which is important in creating a positive memory of her labor and birth. This positive memory is important to the women's postpartum health and memory of her labor and birth. Women's autonomy is also important in terms of marketing as a positive birth memory influences the attractiveness of the doula service to other women and for the same women to return to that hospital as a birthing option.

Economics

Participants viewed hospital-based doula support as an opportunity to attract clients, to "bring up their birth numbers," "increase their market share," provide a unique service that is "in vogue," provide women with "options" and "choices," and increase the diversity of hospital services. In large part, the goal of increasing customer satisfaction drove these hospital doula initiatives. One participant noted that findings from focus groups conducted with women indicated doula services were identified as one way to improve satisfaction with the hospital experience. Another program originated from a Women's Health Task Force formed because the hospital CEO *"believed that women were the key to healthcare, because where a woman has her baby, she will bring her children, her husband, etc."* Another participant indicated that *"with family centered maternity care we wanted to increase our market share, increase our numbers monthly... [and identify] some services that we could offer to our patients that were exclusive to us."* These findings suggest ensuring consumer satisfaction and building up the hospital reputation and clientele contributed to the decision to implement doula programs at some institutions.

Institutional Processes: How hospitals introduced and sustained doula programs

Introduction of doula care

As noted above the values and claims made about doula support played a part in the introduction and implementation of hospital-based doula programs. In this section we describe in detail the two dominant patterns of introducing doula services among this sample of 32 hospitals. Most frequently (n=28), the program was introduced as a stand-alone service or program that complemented general maternity care. In a few cases (n=4) hospital-based doula care was one component of broader institutional initiatives to improve maternity services.

Complementary Doula Programs

Stand-alone, complementary hospital-based doula programs resulted from the efforts of both grass-roots and top-down administrative directives. Program initiators built the momentum around the program and worked to establish it as an option for all women or in several cases targeted and designed for a particular demographic of women, as indicated above. Participants highlighted the need to improve maternity care for women with little support, with low socioeconomic status, at-risk to receive little or no prenatal care, non-English speakers, women from different cultural and linguistic backgrounds, and terminal mothers or women birthing terminal babies. Efforts were often initially supported through grant mechanisms and later resourced by the hospital.

In some cases, internal funding mechanisms (e.g., hospital foundation funds) and donations were used to initiate complementary doula programs, to both attract a

broader clientele and to advance maternity care: *“Money was left by a hospital donor for a women’s resource program and a doula program was one of the things on the table....we were looking to add a little diversity to (our traditional, conservative reputation) and provide a program that complements the medical care they receive (staff fee-for-service program).”*

Doula programs that started with a particular population of women in mind often expanded to the larger hospital population. For example a midwife started a program for her midwifery practice which mainly focused on refugees and women of low SES, but soon the midwives found that it was *“apparent that any woman insured or not, low, medium or high income would be happy to use the service if it was available.”* Another doula program that started as a grant-funded volunteer initiative to provide support to women on state insurance subsequently expanded to include two options. The first component was the free service for the original population of intent (i.e., women on state insurance), provided by volunteer doulas in the process of certification; the second was a fee-for-service option for other women interested in doula support and provided by certified doulas contracted by the hospital. The hospital that provided the free doula service (by contracted doulas) to all Spanish speaking women that needed interpretive services also had a fee-for-service option for other women interested in doula support.

Doula Care as Part of Larger Initiatives

Doula support was also introduced via broader initiatives (n=4). Two hospitals introduced doula support (one was a volunteer program, one paid the doulas) as part of

their rollout of Family-Centered Maternity Care. The program coordinator recalled that *“the program started because the providers here wanted to have family-centered childbirth and they thought that having doulas should be part of that picture.”* The Vice-Presidents at one of these hospitals visited other hospitals with Family-Centered Maternity Care and were exposed to hospital-based doula services in that way. Another volunteer doula program was part of a Mother-Baby Friendly Care initiative.

At one hospital, the hiring of was part of an internal initiative to “transform” maternity care. The doula program was included in improvement efforts based on the Triple Aim framework developed by the Institute for Healthcare Improvement (IHI, 2014): 1)improving the patient experience of care (including quality and satisfaction), 2)improving the health of populations, and 3)reducing the per capita cost of health care ("IHI Triple Aim Initiative," 2014).

Continuation of doula care

In discussing doula program resources, participants identified two approaches. One was the business model frame, in which doula services were evaluated in terms of marketing, cost-savings, and consumer satisfaction. The second involved active advocacy by hospital employees. We discuss these two approaches below.

Business model

Resource constraints were common across programs, although several indicated their program was not under any threat of being cut because it has become integral to the hospital and their maternity services. Among the coordinators who indicated the programs impact on the business aspect of running a hospital, including cost-savings

and marketing, for continued hospital support for the doula program, only one, associated with the hospital that offered free doula services for Spanish-speaking women and fee for service doulas for English-speakers, gave an actual monetary value and indicated that it was a reason the program continues to be supported:

There's a lot of great research on Medicaid and how that would reduce costs for Medicaid patients by using a doula. And then one of the things that I think that's pertinent for our program, is that we're seeing that the average cost of doula services for every delivery is \$216 per patient and for us, our loss, our monetary loss for a C-section, if we have a patient who goes to C-section, if it's Medicaid patient, we lose like \$3,800.00 I think they say, per delivery. And the C-section rate -- I'll tell you, our C-section rate at (hospital name) is 17% and then with the doulas it's 12% and the national rate of C-sections is 32%, so we really are a cost saving program too..... (Program with contracted doulas that has free service for bilingual women and fee-for-service for other women).

In addition to cost-savings, coordinators also indicated that they viewed doula programs as a means to be competitive in the hospital **marketplace**:

I think they (Administrators) see this program as something good for us in the marketplace as far as there are many hospitals that women can deliver their babies at. There are ones that are more open and much fancier, much newer facilities. So this is just a nice piece that they can come here and have that type of extra, so it's part of a marketing scheme. (Coordinator at a free program with paid staff doulas)

The coordinator at a program that regularly charged a small fee (\$75) but had sliding fee or free services for women that could not afford it, noted the link between this financial rationale and consumer satisfaction: *“I mean it’s not a money making thing per say but clients choose this hospital because of the doula program, so it is in some sense. It’s a huge patient satisfier, that’s a big deal.” (Staff Program, small fee of \$75 but funding options for those who can’t afford it).*

Press Ganey hospital service analytics are widely used to evaluate relationships between satisfaction, clinical, safety and financial measures ("Driving Targeted Performance Improvement," 2014). Several participants noted that having a doula program was one strategy for improving the hospital’s patient satisfaction ratings:

Our Press Ganey scores weren’t originally that good as far as satisfaction with management of pain in laboradministration was supportive because this was a way to improve our Press Ganey scores. Satisfaction was a big part of the program. (Volunteer Program Coordinator)

The Need for Persistent Advocacy from within Hospital

Because of budgetary concerns, maintenance of doula programs required ongoing advocacy by key leaders and maternity staff. When administrators proposed closing a fee-for service program that charged (\$400) for doula support, there was widespread outcry:

...when the hospital was looking to cut back – they didn’t look at it very carefully. You just have some guy looking at a paper and saying “let’s cut it”, so it was amazing everybody (patients, providers, the nurses, the community) wrote letters

and petitioned to keep it....(it) was impressive, to see petitions come up that said this program is too valuable and the hospital listened...

Others highlighted the role that support and advocacy by hospital leadership had played in maintaining doula programs. The coordinator of a staff-run, fee-for service (\$75) noted: *“It’s something that the board of directors and the CEO feel very strongly that this is an important part of what we do here and so it is included every single year”*. Another participant indicated that despite support from senior administrators, the doula program was constantly under threat because of budgetary realities:

I don’t really know – I’m hoping it will stay. It’s well-established... if the program will stay around, even though we are highly valued. I think that the Senior Director of OBGYN and our chief are very supportive and have advocated for us for many years. They will continue to do that. If sometime in the future we are not here, it’s not going to be because we are not appreciated, it’s going to be because of financial situations.

Discussion

Our results highlight the importance of key personnel within hospitals and their ideation of doula care (Frambach & Schillewaert, 1999; Shiffman, 2009; Shiffman, J. & Smith, S., 2007). Programs required initial and ongoing internal support by key personnel as well as larger institutional support to establish and sustain these innovative programming efforts. We discuss below the interplay between business and health concerns of hospital institutions mirrored in the theme of consumer versus patient satisfaction.

Key personnel

Our findings indicated that the initiators of hospital doula services were mainly women who held a variety of positions, from administrative leadership to primary care providers and included midwives, obstetricians, and residents, to nurses, childbirth educators, and lactation consultants. They described various trajectories for instituting doula services within hospital organizations, from top-down directives to internal “grassroots” efforts. Either acting alone or with teams of clinicians, administrators were often called upon to identify and implement healthcare innovations; and it was the middle managers who then oversee the implementation of these innovations (Birken, Lee, & Weiner, 2012). This was observed across a number of interviews that indicated hospital administrators were interested in having the doula program started and continued, and passed the responsibilities of program development onto others within the hospital, namely nurses, childbirth educators, and midwives. In contrast, other participants indicated that it was a mid or entry-level hospital employee who initiated the doula program. Taken together, these findings indicate that individuals at varying levels of decision making power within the hospital setting can both serve as the catalyst for initiating innovations and garner support for this type of service.

Of the key personnel, midwives, nurses, and childbirth educators were often behind doula program initiation. This is not surprising given that most doulas ascribe to the midwifery model of care (Morton, Christine H. & Clift, E.G., 2014), and the majority of the nurses in this study were also a perinatal educator or lactation consultant. While there are efforts to encourage continuous labor support by nursing staff (Hodnett, et al.,

2002), nurses and midwives are often busy, manage a variety of tasks and patients, and spend a majority of their time charting and floating between rooms. It has become less common for or expected of nurses and hospital-based midwives to provide the bedside support that used to be integral to obstetric nursing (Davies, Hodnett, Hannah, O'Brien-Pallas, Pringle, & Wells, 2002; Gagnon, et al., 1997; McNiven, Hodnett, & O'Brien-Pallas, 1992; Papagni & Buckner, 2006). The initiation of a doula program, therefore, would be a natural extension of the services midwives and nurses would want to offer. A doula program could serve as a means to bring in elements of their training and perspectives on quality maternity care that are declining due to high patient volumes and changing work demands. Childbirth educators and lactation consultants, may represent what the literature identifies as boundary spanners, individuals that have significant social ties both inside and outside the organization and are able and willing to link the organization to the outside world (Greenhalgh, et al., 2004). Childbirth education within the hospital can also be part of a larger perinatal education department which also includes classes and support network activities that are physically separate from the hospital building, placing it “physically” closer to the community and stakeholders of concern.

Ideas

The claims made about doula support related to four major values: 1) well-being, 2) autonomy for women, 3) respect for women, and 4) hospital economics. These claims can be further condensed into two primary categories: 1) patient-centered concerns for their well-being and satisfaction, and 2) attraction of patients or clients to hospitals, through underlying marketing motivations, which also includes patient

satisfaction. These results highlight that professionals involved with maternity care value the well-being of women and see this innovation as helping them to improve women's health outcomes, including experiences and memories of childbirth, and healthcare practices that influence women's health.

The values of respect and autonomy of women were somewhat less obvious, as these values were discussed less frequently within the data. Respect was a value reflected in programs that were initiated with the intention of providing services to groups of women that otherwise would not have the support at the bedside. Underlying this claim was the value that all women require and deserve equal access to quality care. Less frequently, but still present was the explicit recognition and value of personnel to ensure client involvement and agency over their care. This is consistent with the marked shift in the healthcare system from a top-down directive from healthcare providers to a collaboration between client and provider through communication and shared decision-making (Ishikawa, et al., 2013).

Institutions

We found that hospitals introduced doula programs in two ways: 1) most frequently as a stand-alone program that complements general maternity care, or 2) less frequently, doula care was one component of larger initiatives within maternity services. This distinction is important because it suggests that while these hospitals are providing doula services, the majority of these efforts remain as options or stand-alone programs, reflecting perhaps the continuation of fractured efforts of maternity care improvement as opposed to integrated and comprehensive reform. Additionally, two-

thirds of these programs are volunteer doula programs. Doula care embedded within larger systems change efforts or initiatives may provide greater potential for sustainability and evaluation and would likely impact the care and outcomes of women in a more profound and comprehensive way.

In addition, some programs were initiated as part of targeted grant efforts for particular populations of women (i.e., women on state insurance). The U.S. healthcare system still relies on external grant initiatives to supplement standard care for individuals that are often under or uninsured or vulnerable populations, as well as for opportunities to explore innovative ways to improve quality, cost, and efficiency of healthcare. Infant and maternal morbidity and mortality rates within the US continue to remain suboptimal when compared to other high-income countries, especially for groups of women that fall into low social and economic categories (Kim & Saada, 2013). Class and race distinction does exist in the US, and it is evident in the disparities in maternal and infant health outcome data (Bryant, Worjolah, & Washington, 2010). Grant initiatives will continue to be a predominant mechanism for organizations, including hospitals and their community extensions, to pursue innovations and solutions for socially divergent labor and birth outcomes. Doula support will likely continue to be an attractive low-cost targeted improvement effort, especially if it is a volunteer based model. The next step is to find ways for the hospital to assimilate grant-based initiatives into the standard of practice as some hospitals have been able to do. Some hospitals that started programs with a particular population in mind, realized that the service

would benefit and be appreciated by other women and so expanded the program to be more widely available. This has happened for both volunteer and staff-based programs.

Hospitals maintained doula programs because it was found to be good for business and it was continually advocated for by key personnel. The emphasis of the hospital institution on the business aspect of providing doula services illustrates the push and pull between the marketplace and quality healthcare. While women are not asking directly for hospital doula services (except in one case), program initiators and hospital institutions recognize the growing trend of doulas at birth, its attractiveness for women, and its value for women. In addition, hospitals value patient satisfaction as it is related with business success by leveraging clientele through appealing mechanisms.

Doula support as a way to further patient or consumer satisfaction

These findings highlight the competing understandings of satisfaction as health outcome for the patient and customer satisfaction as an indicator directly related to the economics of the healthcare institution. The doula program supporters and advocates who participated in this research described various conceptualization of satisfaction; these differences have implications for women receiving doula care as well as for the continued development, implementation and monitoring efforts of hospital-based doula programs. Improvement of women's satisfaction with both their care and the labor experience was a central finding that reflected both the ideas of those that developed doula programs and the interests of institutions.

Patient satisfaction is defined as the patients' subjective evaluation of their cognitive and emotional reaction as a result of the interaction between their

expectations regarding ideal care and their perceptions of actual care (Johansson, Oleni, & Fridlund, 2002). Satisfaction is also a direct objective of doula care, as satisfaction with experience contributes positively to emotional well-being and postpartum health of women (Campbell, Scott, Klaus, & Falk, 2007; Scott, et al., 1999; Sosa, Kennell, Klaus, Robertson, & Urrutia, 1980). Personnel involved with program initiation and management understood this about doula support and is reflected in the claims made about doula support.

Satisfaction, captured frequently by information about the patient experience is also an indicator of healthcare quality both that services are good and that women will return ("Myth: High patient satisfaction means high-quality care," 2013). Satisfaction in this sense is consumer satisfaction and is a means to improve healthcare quality (Johansson, et al., 2002). Consumer satisfaction reflects the healthcare movement towards more patient-centered and patient-driven care (Ishikawa, 2013), yet the mechanisms behind consumer satisfaction and how these factors affect healthcare use and outcomes remains controversial and not fully understood (Fenton, Jerant, Bertakis, & Franks, 2012).

Limitations

This study was based on a purposeful convenience sample of extant hospital doula programs; our findings did not reflect efforts and experiences of hospitals that previously had hospital-based doula programs but subsequently suspended or terminated the service. Possible reasons for termination may include termination of grant funding or personnel changes.

Data from each hospital were limited to generally one telephone interview at each site, with the exception of the 4 programs that offered opportunity to talk with program developers and lead doulas. Despite the informants' in-depth knowledge of the program and hospital environment, the research design did not allow for a more thorough on-site examination of the hospital environments and contexts, which could have added richness to the data but was not possible within the scope of this research. For example, different hospitals may have different needs for labor support from doulas, based on their size, physician and midwife practices, nursing model of care, and population served.

Conclusions and Implications for Future Research and Practice

This study contributes new understandings about the emergence of hospital-based doula programs in the US. The data indicate how innovative programs can be introduced via individuals within various levels of the hospital hierarchy. The results also suggest that doula services became part of hospital services for different reasons, as exhibited in the various understandings and claims about doula support. This research suggests and affirms that ideas and framing of issues by the people involved with the program are essential for sustainability and momentum of the program. Infrastructure may help those who are passionate and enthusiastic about doula care, evaluate, improve upon, and provide evidence for continuing doula program and service efforts within hospitals. Hospitals that have or are considering initiating hospital-based doula services can learn from these successful programs and use this research as

leverage for what may continue to be a growing movement within the hospital maternity industry.

As doula care grows within and across hospitals and the broader community, the movement would benefit to understand more fully doula support as optional rather than as an integral part of standard maternity care. There is a need for further examination of implementation models and the evaluation and monitoring of existing hospital-based doula programs. This is critical as hospitals across the country seek to address new payment and reimbursement realities with the Patient Protection and Affordable Care Act and continue to seek to improve maternity health outcomes while also meeting budgetary realities in a country with escalating healthcare costs. Process and outcome evaluations of hospital-based doula programs are necessary will further knowledge on how institutionalized doula care contributes to women's birth experiences and outcomes and conversely, how institutionalization impacts the doula model of birth support.

Table 4.1: Actors Involved with Doula Program Initiation (N=32)*

Who's Idea? →	Developers of Programs →	
Individuals		
CEO (n=1)	Childbirth Educator	Board of Directors Vice Presidents Hospital Administration Administrative Director of Women's Services Medical Directors Nursing Directors Nursing Managers Marketing Teams Risk Management Teams Physicians Midwives Nurses
VP (n=1)	Director of Family Birth Center Education (lactation, doula program, childbirth education)	
Head of Obstetrics (male) (n=1), Head of Birth Center (n=1)	Nurses	
Physician (n=1), Resident OB (n=1)	Community Doula; Physicians, Nurses, Midwife	
Midwives (n=6)	Nurses, Midwives, Community Doulas	
Nursing Director (n=2)	Community Doula; Nurse	
Nurses not Childbirth Educators (n=4)	Nurses	
Childbirth Educators** (n=5)	Childbirth Educators, Nurses, Doulas	
Lactation Consultants**(n=1)	Lactation Consultant/Educator, Doula	
Doulas (n=3)	Doulas, Nursing Managers	
Committees/Groups		
Women's Services Task Force (Male Physician's idea) (n=1)	Nurses also Childbirth Educators	
State Grant (Coordinator of grant was Nurse Manager later Director) (n=1)	Volunteer Coordinator, Nurse Manager/Director	
Focus Groups with Women by Nursing Obstetric Director (n=1)	Nursing Obstetric Director and Nurse	
Pregnancy Improvement Initiative (n=1)	Team including product manager, doula, executive administrator for women and children's services	

*All actors are women unless otherwise indicated. Male gender was only noted when participants volunteered the information; it was not a direct question in the interview.

**Often Childbirth Educators are also nurses and/or lactation consultants and/or doulas. Lactation consultants are often childbirth educators and/or doulas.

Table 4.2: Value claims

Value	Definition	Claim
Well-being	Safety, health, comfort	Healthy outcomes for women, emphasis on the well-being of the mother, her emotional health, memory of childbirth, satisfaction with experience, and other health outcomes such as length of labor, low interventions and complications.
Respect	Recognition, Freedom of choice, Equality	Particular groups of women deserve this type of support, and they are less likely to seek it out or have access to it on their own. It is their right to have access to doula support, to have equal opportunity to quality care. It's a justice issue.
Autonomy of Women	Participation in decision-making	Doulas work for the autonomy of women to choose and be agents in the direction of their care
Economics	Increase in revenue	Attractive to clients, increase market share

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MANUSCRIPT 2

The Landscape of U.S. Hospital-Based Doula Services: Service Delivery Model Variations and Implications for Future Institutional Efforts²

ABSTRACT

Background: The benefits of continuous labor support provided by a doula is well-established. Currently, most doula support is accessed privately and outside the hospital, but there is a growing presence of hospital-based doulas. Little is known about the structure and components of hospital-based doula services. The aim of this research was to identify, describe and analyze the components and structures for service delivery of U.S. hospital-based doula programs.

Methods: Data sources included website review of 34 U.S. hospital-based doula programs; semi-structured interviews with the program coordinators of 32 programs; and additional interviews with individuals (n=6) involved with program management at three hospitals.

Results: We identified three primary staffing relationships with the hospital: volunteer, staff, and contract. The majority of hospitals provided doula services at no extra cost to the laboring women (n=27); the remaining hospitals ranged in cost (\$50- \$750). Most programs required and/or provided on-site training (n=14), 6 required doulas to be certified, and 14 required completion of a labor support course. Doulas were assigned

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to women during the prenatal period (n=7) or were on-call for shifts (n=22) and assigned when women were in labor; some hospitals assigned doulas during both times (n=6).

Conclusions: We observed wide variations in hospital-based doula training requirements and service delivery models, indicative of a certain degree of institutional flexibility. The majority (n=20) of the programs were volunteer models, with doula services provided at no cost to the birthing women (n=27). Although free doula services have the potential to increase doula reach, volunteer staffing models have particular challenges related to program implementation. Further research evaluating processes and outcomes across hospital-based doula services is needed.

Key words: doula, labor support, hospital, innovation, maternity care, volunteerism

INTRODUCTION

Despite advances in medicine and the amount of money spent on healthcare, maternity care remains suboptimal in the United States. The maternal mortality rate of 13.3 (2006 data) is an increase from 6.6 deaths per 100,000 live births in 1987 and a third of women that give birth experience some form of complication ranging from depressive symptoms to the need for cesarean delivery ("Maternal, Infant, and Child Health," 2013; Amnesty, 2010). Within this same time period, medical interventions have increased ("Maternal, Infant, and Child Health," 2013; Amnesty, 2010; Sonosky, et al., 2009) and bedside support during labor has decreased (Papagni & Buckner, 2006; Tumblin & Simkin, 2001).

Continuous labor support, most often provided in the form of a doula, is a low-cost innovation associated with improved labor outcomes and reductions in costly interventions (Hodnett, 2012; Kozhimannil, Hardeman, Attanasio, Blauer-Peterson, & O'Brien, 2013). The doula as a member of maternity care efforts has grown over the last three decades in the US (Papagani & Buckner, 2006), and is gaining traction independently (Lantz, 2005), in community-based settings ("HealthConnect One," 2011), and hospital settings (Morton, C. H. & Clift, E.G., 2014).

Doula support is typically understood through the behavioral health construct of social support, and consists of continuous physical, emotional, and informational support to mothers before, during, and after birth ("DONA International," 2005b; Gentry, et al.; Meyer, et al., 2001). Most definitions highlight the continuity of support during labor, birth, and the immediate postpartum, saying little about the prenatal expectation (Kennell, et al., 1991; Sosa, et al., 1980); others include partner support and advocacy (Gilliland, 2002). Doulas are trained and experienced in childbirth. The doula's role is to ensure that the woman is supported in her choices and feels as safe, comfortable, and confident as possible during her birth (Meyer, et al., 2001).

The location of doulas on the paraprofessional spectrum, (ranging from natural lay helpers to peers to paraprofessionals) (Dennis, 2003b), is not clear (Lantz, et al., 2005). Training is one criterion used to determine the location on this spectrum (Dennis, 2003b). Doula training requirements and certification vary by certifying organization: Doulas of North America, International, ("DONA International," 2005a), Childbirth and Postpartum Professional Association, ("CAPPA," 2013), Birth Arts

International ("Birth Arts International Doula Education," 2012), and International Childbirth Education Association (Gagnon, et al., 1997), although it typically involves a labor support course, an extensive reading list, evaluations by women and maternity staff, and work experience as a doula. There are no state or national regulations requiring that doulas or labor assistants be certified or registered (Lantz, et al., 2005).

The scope of doula commitment is not consistent across the doula literature which establishes its benefits. In studies of women with continuous labor support by a trained woman during labor and birth, women had shorter labors and exhibited increased maternal-infant interaction in the immediate postpartum period (Sosa & Kennell, 1980; Morton, 2014). Other studies indicated reductions in cesarean section, forceps delivery, oxytocin augmentation, and labor length (Kennell, 1991; Papagani & Buckner, 2006) for women with continuous labor support. In these studies labor support was provided by a woman whom the laboring woman had not met before (Kennell & Klaus 1991; Morton, 2014, p. 171). A recent review indicated that outcomes for women were most beneficial when labor support was provided by a person who "is present solely to provide support, is not a member of the woman's social network, is experienced in providing labour support, and has at least a modest amount of training (Hodnett, 2012, p.2)."

Findings from a more recent Cochrane review of continuous labor support by Hodnett and colleagues (2007) suggest improvements in labor outcomes including increased satisfaction with childbirth experience, postpartum interaction with infant, breastfeeding initiation, and infant APGAR scores (Hodnett, et al., 2007). Other

researchers have noted associations between women receiving doula support and reductions in cesarean deliveries, length of labor, use of analgesia, operative vaginal delivery (e.g., use of vacuum extractor or forceps), and lower healthcare costs via fewer costly interventions (Ballen & Fulcher, 2006; Hodnett, et al., 2007; Kashanian, et al.; Koumouitzes-Douvia & Carr, 2006; Kozhimannil, et al., 2013; Langer, et al., 1998; Lundgren, 2008; Mottl-Santiago, et al., 2008; Scott, et al., 1999). A recent study of a community-based doula program provided evidence of the benefits of doula support beyond labor outcomes to also include improvements in low-birth weight, an indicator that is typically addressed via prenatal care (Kotelchuck, 1994; Krans & Davis, 2012). These researchers examined doula-support initiated in the prenatal period; women who self-selected into the doula-supported group were four times less likely to have babies with low birth weight (LBW) (Gruber, Cupito, & Dobson, 2013). These findings suggest that variation in onset of doula support (i.e., the prenatal period) and service delivery may impact different outcomes.

Most of the existing research focuses on independent and community-based birth doulas and how their services are delivered (e.g., onset and duration of support) and accessed (e.g., fees and locations of access). Independent and community-based doulas meet and accompany women throughout pregnancy (of varying lengths of time) and then continuously during active labor and birth. The prenatal and postpartum component of support varies given the needs and contract between the doula or doula program and the client. Fees for independent birth doulas range from no charge to

\$1,000, and are often dependent on the doula's experience and training (Gurevich, 2003).

Community-based doula programs are also growing. One accredited community-based model has 50 existing sites in 18 states; the doulas are salaried and supervised and accompany women prenatally through the first months postpartum and accompany them into the postpartum ("HealthConnect One," 2011). Many community-based doula service delivery models include the provision of extensive prenatal support that may include accompaniment to childbirth education classes or prenatal appointments (Gruber, et al., 2013). In others the doula develops a relationship with the woman in the prenatal period and discusses plans and feelings about the upcoming birth, but may not offer accompaniment to childbirth classes or prenatal visits ("Chicago Volunteer Doulas,"). Community-based program services are provided in two ways: 1) meeting with families prenatally and accompanying them to any hospital during labor, and 2) via an on-call model in which volunteer community-based doulas are called into the hospital by providers that practice at identified hospitals to support a woman already in labor ("Chicago Volunteer Doulas,").

Community-based doulas often volunteer their services, or offer services on a sliding scale ("Chicago Volunteer Doulas; Gruber, et al., 2013), and come from a similar peer group (Gruber, et al., 2013). Community-based models are often designed to serve women potentially at risk for adverse birth outcomes and underserved populations ("HealthConnect One," 2011; Gruber, et al., 2013). Training of community-based volunteers is often integrated and provided by the program offering doula

services ("HealthConnect One," 2011; Gruber, et al., 2013). In some volunteer community-based programs doulas come to the program having already completed birth doula training or in the process of certification ("Chicago Volunteer Doulas,").

Published research on hospital-based doula service is limited and tends to emphasize labor and birth outcomes (Mottl-Santiago, et al., 2008; Paterno, et al., 2012). How hospital-based doula services align with independent and community-based models of doula service delivery has not been studied. This study begins to address this gap. The purpose of this study was to examine currently operational U.S. hospital-based doula programs and to provide an intentional analysis of hospital-based doula training and certification, contractual relationships of doulas with the hospital, costs of doula services, and how doulas are connected with women, including the scope of doula service commitment. We discuss implications for women and hospitals (i.e., perinatal staff including midwives, nurses, childbirth educators, obstetricians and others involved in maternity care improvement efforts) interested in developing hospital-based doula services. Hospital-based doula programs are in a fairly young stage in the innovation life-cycle, although a few have been established for as many as 20 years. Examining these programs requires qualitative and descriptive information of current efforts to capture layers of variation and meaning across settings (Maxwell, 2005).

METHODS

We conducted a qualitative descriptive study to identify, describe and analyze the components and service delivery structures among U.S. hospital-based doula programs.

Sample

We identified existing hospital-based doula programs through an Internet search using search terms “hospital,” “doula program,” and “[state name]”, and snowball sampling (Figure 4.1). Of the 50 programs identified, 6 were not currently active and 4 were not associated with the hospital. We contacted the 40 eligible hospitals and received responses from 32 (80% response rate). Two additional programs were included based on sufficient information gathered through website review.

Programs are clustered regionally (Table 4.3): 10 programs in the Pacific, 8 in the Northeast, 8 in the Midwest, 4 in the South, and 4 in the Southwest. Of the 21 states represented, California and Oregon had the most programs, with 4 in each state. The length of program establishment ranged from 1 to 20 years, with an average of 10 years. Informants included hospital staff and volunteers overseeing the doula program (n=32). Most (n=25) doula program coordinators held additional positions within the hospital (e.g., Director of Obstetrics or Perinatal Education, Labor and Delivery Nurse, Midwife).

Data Collection

We identified and reviewed hospital websites (n=34) containing information on doula program characteristics and information about how women access the program. We completed semi-structured, audio-recorded phone interviews with program coordinators at 32 of these hospitals and conducted further interviews with program management staff and administrators (n=6) at 4 hospitals. In the process of recruiting participants and at the beginning of each interview encounter, we informed participants of the confidential nature of the interviews. The interview guide focused on concepts of

program implementation and adoption including program structure, history, reception by hospital providers, successes, and challenges (Clark, 2002; Fixsen, et al., 2005; Shiffman, J. & Smith, S. , 2007; Zazzali, et al., 2008). Over time, we incorporated additional questions as information about doula programs emerged from the interviews (Glesne, 2011). Interviews were recorded with the application CallTrunk for iPhone. We gathered information about program characteristics (cost to women, doula contractual relationship) (85% of eligible programs identified) from 34 programs and interviewed staff from 32 programs (80%).

Data Analysis

Audio recordings of the interviews were rendered into written text by the primary researcher and a professional transcriptionist. The interviewer then conducted an auditory review of each interview; during this process sections of the interview were organized by topic domain and thematic content was noted (Crabtree & Miller, 1999, p. 135). Formal coding of the qualitative transcript data then proceeded using categorical and *a priori* codes taken from interview guides; emergent themes within categories were added (Maxwell, 2005). We used NVivo 10 to manage the qualitative data, and compiled and analyzed categorical and numerical data using Excel (QSR, 2012). Trustworthiness was assured via peer review, presentation of negative cases, and detailed description.

RESULTS

We identified a number of common elements of doula service delivery across the programs. Figure 4.2 centralizes how women are at the center of care. The doula

contractual relationship with the hospital (i.e., as an employee or volunteer) is discussed first, followed by doula training and certification which occurred outside and/or within the hospital, and then costs of programs for women and hospitals. We present our findings of each of these elements and then discuss how doulas were connected with women and the scope of the doula's commitment. Given the variation across programs, we compared service delivery components in relation to each other and to traditional understandings of doula support. Figure 4.2 displays these components in a model centralizing women as recipients of doula support within the hospital.

Doula Contractual Relationship

We identified three distinct contractual relationships between doulas and hospitals (Table 4.4), doulas as: volunteers (n=20), paid hospital staff with benefits (n=8), and contractual employees without benefits (n=3). Two hospitals had both contractual and staff doulas (i.e., hybrid). Hospitals with volunteer programs had more doulas, ranging from 8 to 60, compared to hospitals with paid staff or contractual doulas. The higher number of volunteer doulas was related in part to the varying level of commitment among volunteers.

Participants were not in agreement about whether or not doulas should be paid or volunteer. A nurse who developed a volunteer program indicated the conflicting issues around volunteer work:

"I actually feel that the doulas should be paid, that asking people to do this as a volunteer activity means that...it devalues the work that they are doing. The problem is how do you fund that? And, I know some hospitals do it. I never

figured out how...And of course, the literature shows that...training the nursing staff to be doulas had no effect. So then, the doulas need to be separate from the nurses."

The Director of Obstetrics who developed a staff program expressed a similar philosophy: *"I'd rather pay a doula because it makes her feel more valued, makes her more a part of the team. You get hospital benefits. It's more legitimate."* The coordinator of a volunteer program noted that not having to pay doulas was a way to provide the service to women who could not afford to pay for it themselves. She suggested that the volunteer model ensured a certain level of commitment from the doulas: *"people who volunteer for 40 straight hours are doing it because they love it and they do it from the heart and they're very good at what they do...they do it because they want to."* In addition she acknowledged other programs she was familiar with *"where they pay their doulas and then the money goes away and their doulas go away...and we've weathered all kinds of budget constraints."*

In contrast, participants associated with both volunteer and paid doula programs indicated that doulas provided professional and skilled work that is worthy of monetary compensation and recognized as contributing to improved outcomes. Additionally, payment provided leverage for ensuring reliable and consistent care from doulas; alongside training, a certain level of skill and time commitments could be required. Some coordinators indicated there had been push-back in their local community by independent doulas seeking payment for their services, seeing the free hospital program as competition to their independent doula businesses. Most of these

programs indicated that the majority of women served by their program would not otherwise have sought out an independent doula, due to payment barriers or lack of knowledge about doulas.

Doula Training and Certification

Some hospitals (n=14) provided in-house doula trainings, and among these, most were volunteer programs. Other programs required that doulas have prior training or certification (Table 4.5). The certification organizations represented included Doulas of North America, International, Childbirth and Postpartum Professional Association, Birth Arts International, and International Childbirth Education Association. Across the board, hospitals required doulas to attend hospital-wide orientations and meet requirements for all hospital volunteers or staff (e.g., HIPPA training, TB tests, immunizations, and any other hospital specific trainings).

Programs offered their own training in part to ensure consistency of training as doulas come with a range of training and experience. The costs involved in taking a doula training course and certification processes can be prohibitive, especially for volunteers. As an incentive, doulas occasionally received reimbursement for training and/or certification fees after a specified service commitment to the program (n=3); coordinators of both staff and volunteer programs indicated this was helpful for doula retention. Coordinators recognized the opportunity the hospital program offered doulas working towards certification. In the words of one volunteer program coordinator, *“It’s a win-win for (the doulas). Because we provide the training at a*

reduced cost and provide them with an opportunity to get experience and the births needed for their certification”.

The majority of volunteer programs (n=12) offered in-hospital doula training, in several instances as a means to recruit volunteers. Only one volunteer program required certification. Retention and recruitment of doulas, for both volunteer and paid doulas, although most frequently for volunteers, was a persistent challenge. Participants noted several patterns among volunteer doulas, some remained with the hospital program, others moved on to practice independently, further their education, or decided that being a doula was not for them. However, a participant from one volunteer program put a positive spin on doula turnover, reporting new doulas offered “a new burst of energy” into the program. In contrast, another coordinator suggested newly trained doulas may encounter doulas that tend to be “intimidated by nurses” or “overwhelmed by high stress situations.” This participant emphasized the importance of training and mentorship efforts in preparing new doulas.

Regardless of program format, mentorship of new doulas was a way to supplement doula training and evaluate new doulas (n=16); this was done in volunteer, staff and contract programs (Table 4.5). A volunteer program used mentors to assist in assessing doula competencies, to *“make sure they are meeting our criteria of being a doula. For example, how are they communicating? What comfort measures do they use? How do they facilitate communication with the providers? Are they intimidated by the nurse or by the doctor/midwife?”* Another volunteer doula program that provided on-site doula training required doulas new to the hospital to shadow a nurse:

... break when she breaks, eat when she eats; follow her everywhere... my goal isn't labor support experience, it's that they get a comfort level going in and out of the rooms. .. nurses do that every day ...It's a good experience for (the doulas) to understand how to build that bond quickly, get an idea of the nurses role, and (her) model of excellence - how to role model good behaviors, touch techniques, how to respect privacy, how to make the patient feel special and unique.

Cost of Service

In terms of cost to the woman, most hospitals (n=27) offered doula services at no extra cost to the patient. All volunteer programs were free. The remaining programs ranged in cost from \$50 to \$750. Several programs had varied practices in doula service fees. For example, one program offered free services to non-English (primarily Spanish speakers), and had a separate program for paying patients. Another offered free doula services to waterbirth clients and at-risk families, although typical cost was \$50. Four of the free fee-for-service staff run programs offered a reduced cost or free services to at-risk, Medicaid, or military families. In one unique instance, the program started as an opt-out program for all women in a particular clinic.

Cost of doula service for women was not linked to doula certification requirements. For example, there were two staff programs that required doulas be certified; one offered doulas at no charge and the other charged the woman \$400. In another staff program that required in-house training, the cost to women was \$425 for a vaginal birth.

Hospital costs, namely the resources necessary for effective program implementation, were largely personnel (i.e., program coordination and management and doulas) and training (e.g., of doulas, of other maternity care staff). Salaries and wages for program coordinators and doulas (e.g., on-call pay, rate once called in, or contract fees per birth) were the most often discussed resource needed for program sustainability. The association between program coordinators who were volunteers and volunteer program format was not complete; 26 programs had paid doula coordinators while only 20 programs had volunteer doulas. Frequently program coordinators that volunteered (n=6) shared responsibilities (n=4) with another co-coordinator or with a doula.

Other program costs included the resources necessary for program implementation, continuing education of doulas and maternity staff, training for other maternity staff, advertising and outreach, space for trainings and meetings, and space for coordinators to work. Other expenses involved in the provision of hospital-based doula services included birth kits (e.g., aromatherapy oils, expendable goods), parking passes and meal vouchers for volunteer doulas, and desks, computers, and office supplies. Coordinators identified other types of resources, including the time commitment required to be a doula, having and funding available to provide doula services to women unable to pay for them, and communication between program and labor and delivery unit.

Doula Assignment Models

Programs connected doulas with women in two primary ways; doulas assigned to on-call shifts (n=22) and prenatal assignment or matching of a doula (n=7). The primary distinction among these was that with prenatal assignment the doula was available for the woman until she went into labor, similar to the standard independent doula/client relationship. In the on-call model, each doula signed up for a specified number of hours on a particular calendar day, and when a woman went into labor during that shift, the doula assigned to be on-call would accompany the woman. This option is similar to the provision of services through some community-based models. Whether the on-call doula and woman would have had an opportunity to meet the woman during the pregnancy varied across programs. Additional coverage needs were addressed through on-call for shifts (n=6), a Call List option, and mixed assignment strategies (Table 4.4).

On-call for Shifts

The majority of programs (n = 27) offered on-call doula support for women once they went into labor (Table 4.4). Doulas typically signed up for 8, 12, or 24 hour call shifts every month, the most typical format was 12-hour shifts. The number of monthly shifts doulas were required (staff programs) or encouraged (volunteer programs) to sign up for varied across programs. In some programs, the on-call doulas only came to the hospital when there was a request from a laboring woman or provider (i.e., nurse, obstetrician, or midwife). In others, the doulas were expected to be at the hospital during the shift and to be available to any women in labor at the time. As a way of

promoting the doula programs, coordinators at three hospitals actively encouraged on-call doulas to go to the hospital and offer their services to women directly or via the labor and delivery nurses. One participant, who volunteered as a doula and also coordinated the hospital doula program, reported the advantage of having doulas contact laboring women directly:

We've found that ... when we actually go up there and say 'Hi, I'm the doula on-call, I'm going to be in the waiting room, give me a call; I'd love to help a mom tonight.'That's a really big difference than just having our number up on the white board that they can call..... A lot of it (now) is just individual relationships.

At one hospital, when there were no laboring women on the unit requesting a doula, on-call doulas engaged in other activities, such as holding babies in the nursery, offering breastfeeding educational sessions, and assisting the labor and delivery nurses.

Prenatal Assignment

Among the 12 programs that provided prenatal matching either exclusively or in addition to on-call doulas, 6 were volunteer programs, 2 were staff programs with no charge to the woman, 3 were contract programs (Free, \$50 and \$200 charges to the woman), and 1 was a hybrid model (staff/contract) free to women (Table 4.4). In these programs, the doula coordinator assigned doulas to clients. Assignment generally was based on doula availability, although in a few instances the coordinators reported they conducted prenatal interviews and in making the assignments considered each woman's personality, needs, and goals for the birth. Doulas often met with the expecting woman prenatally at least once to discuss birth goals and then met them at the hospital when

they went into labor. Most coordinators indicated prenatal meetings occurred in public spaces, in client's homes, and in convenient locations for both doula and client, however, some hospitals required prenatal meetings occur at the hospital or in a public space because of liability concerns. *Challenges and perspectives of prenatal assignment in the hospital setting*

Participants also discussed the challenges of providing hospital-based doula support throughout the prenatal period. One volunteer program coordinator described this as a key difference between the hospital-based programs and private doulas:

We have tried to match people prenatally, but it doesn't work. It's kind of a drawback - I feel it's an integral part of supporting someone and that family, but the doula program is designed for women who can't really be on-call really [like a for-hire private doula].

In acknowledging this challenge, another coordinator also indicated the absence of prenatal support had not been identified as a huge drawback to success or benefit for women:

This is a very different role because we don't know the woman prior to walking into the room to help them. While we all know the differences regarding emotional stability and relaxation when you have that pre-existing relationship (we, doula [and], the midwives, understand that when you have a pre-existing relationship) but still these women have been very happy for support even though it's a brand new face that they are meeting spot on at the moment of labor.

The majority of hospital-based doulas did not meet clients prenatally. To bridge this gap in prenatal interaction, program coordinators used a variety of outreach methods such as “Meet the Doula” nights, posted pictures and interviews with doulas online, and sent doulas to childbirth classes and tours as ways to interact with women who may potentially access the service. In one staff program, each doula met every patient during group prenatal care (opt-out staff program mentioned below).

Mixed Assignment Strategies for Prenatal Doula Coverage

Six programs offered a mixed model in which doulas that prenatally matched doulas with clients also covered every day with 1 or 2 doulas on-call for shifts. Others have tried to do both in the past or would like to try doing both. One way this was done was by forming care teams of 2 or 3 doulas to one woman. What is possible to provide differed with the popularity of the doula program, funding, and doula staff availability.

Call List Strategies for Additional Coverage

Participants clearly identified that with existing resources the programs were unable to guarantee doula support for all women who might want or benefit from a doula: *“I don’t have enough doulas to support the program, I barely cover 4% of the births...depends on the month.”* The coordinator of a volunteer program recognized the challenge of not being able to respond to a patient’s request: *“We do a pretty good job considering, but sometimes our patients are told ‘No.’ My biggest goal is that that will never happen and that will never be absolute without paying them [doulas]. That’s going to be the only cure.”* Another staff program coordinator noted the program’s ability to respond despite the inability to predict or anticipate need: *“sometimes it*

comes in spurts when we have 4 clients in at once, but our doulas are amazing; they step up. If we call them and ask them to pick up an extra shift, they are really good about doing that.” Some sites had additional resources, including a “May Call/Text List” or a “Dial a Doula” option. These resources were particularly useful for programs that primarily matched women with doulas prenatally. With these resources, doulas could be provided for the occasional woman who came in requesting a doula or who was identified as someone who might benefit from some additional support.

Strategies to increase awareness and demand for doulas included community outreach to increase women’s knowledge about the program and promoting nurse and obstetrician referrals to the program. Call lists were often part of the strategy to encourage nurses to offer doula services to women:

One of the things that I’ve really pushed and haven’t been completely successful at is having every single day of the month covered with someone on call...if there is someone on call it is really easy for the nurses to offer a doula to the patient. So if every day is covered, the nurses will be more likely to offer the service.

(Volunteer Program in NE)

Coordinators also sought to increase program utilization through marketing, meet the doula nights, and introduction of the program to childbirth class participants.

Scope of Doula Commitment

There was considerable variation across these hospital-based doula programs in relation to the extent and scope of individual doula’s engagement during the labor and birth process and in many instances it was a function of the contractual relationships

doulas had with the hospital. For example most staff and contract programs required doulas to stay through the birth of the baby and 1-2 hours postpartum; one had the option of handing off to the next doula on call. In contrast, volunteer programs varied substantially in terms of the expected commitment from the doula. The practice of shift hand-offs between doulas was reported by coordinators from three programs (1 volunteer, 1 staff, and 1 hybrid staff/contract doulas).

They're really, not unlike nurses, on call for 12 hours and even if the woman is ready to push at 12 hours, their commitment is up then and they can choose whether to stay or not. And we have people who have children to pick up or other commitments, so they really are on 12 hour shifts. (Contract Program in SW)

A unique pilot program offered at one hospital clinic provided doula support to all laboring women unless they specifically declined the service and said “no, thank you”. Doulas worked 12 hours shifts and if a woman was still in labor at the end of the shift, the care passed to the next doula. At the time of the participant interview this program was in the pilot phase, but was scheduled for scale-up from the clinic-base to other clinics and hospital within 3 months.

In other programs that did not have hired doulas, coordinators reported they generally encouraged doulas “to make the true doula commitment and stay until the baby is born.” When staying with the woman throughout labor was not possible, strategies to ensure continuous labor support included calling another doula by either accessing the *call list* or calling the scheduled doula for the next shift. Coordinators indicated a high level of commitment from employed and volunteer doulas in their

programs, highlighting how many would go above and beyond so they could stay with a woman, even during really long labors. Others indicated the challenge for women with lives and commitments (e.g., small children, other jobs) outside their doula work, whether staff or volunteer, for doulas to stay throughout the entire labor.

DISCUSSION

Hospital-based doula programs remain an infrequent maternity care component, although clearly growing as it expands into the hospital arena. Hospital-based programs both align with and differ from independent and community-based doula service delivery. Among the hospital programs represented in this research, only a few (n=7) were able to provide doula support in the traditional way of prenatal matching and support. Our results highlight the primary objective of programs to connect women with doula support during labor; how this was achieved varied in different settings. In the following section we discuss the major themes that emerged from the data, informed by our conceptualization of the components of hospital-based doula service delivery (Figure 4.2) that emerged as important elements of hospital-based doula services.

Volunteerism and the Costs of “Free”

Our findings from interviews conducted with 32 key informants suggest that hospital-based doula work is primarily a volunteer service (n=20) provided at no out-of-pocket cost to women (n=27). This differs from independently sought doula support which is a fee-for-service model. Hospitals align more closely with some community-based doula programs, particularly those that are free or operate on a sliding-scale to

women. In both hospital and community-based programs doulas can be volunteer or paid via the community organization or hospital. Our discussion of volunteerism is likely applicable to hospital-based and community-based doula programs with low-paid doulas, given some of the logistical difficulties of providing doula support.

Examination of the pros and cons of volunteerism versus employed doulas is reminiscent of the discussions regarding payment of community health workers (CHWs), also paralleled in community-based doula work that follow CHW models ("HealthConnect One," 2011; Glenton, Colvin, Carlsen, Swartz, Lewin, Noyes, & Rashidian, 2013). Much of this discussion revolves around the assertion that CHWs engage in work that merits remunerations (Lehmann & Sanders, 2007) and the predictions that sustaining volunteer CHW programs is not feasible (Glenton, et al., 2013; Rosenthal, Brownstein, Rush, Hirsch, Willaert, Scott, Holderby, & Fox, 2010). In our research, key informants from volunteer programs indicated that volunteers were committed to providing labor support; but they also highlighted concerns about retention. The structure of some of these volunteer hospital-based doula programs addressed the anticipated turnover of volunteers, including strategies such as offering periodic training as a means to ensure volunteer replacements. Furthermore, individual doula's availability and ability to volunteer, or work as a paid doula, tends to fluctuate across her life span (Morton, C. H. & Clift, E.G., 2014). For example, doulas may have more ability to volunteer during times of professional development or education and later in life after any children are grown. The availability to commit to regular volunteer

work may be more restricted among women with small children and those who are employed full-time.

Volunteer doula's availability may also influence the scope of service provided to the laboring woman. However, our findings indicated the scope of service provided to women did not differ between the volunteer and paid doula models. Many volunteer programs indicated a high level of commitment from the doulas to remain with the woman for the entirety of her labor or handed off to another doula. Further research is needed to determine the impact of the hospital shift work model on provision of doula support, patient receptivity and satisfaction, and birth outcomes.

Hospital costs are typically reimbursed by insurance. Downsides of reimbursement include stricter regulation of doulas and how they practice, often through certification. Another concern is that professionalization and reimbursement regulations may compromise the doula's creativity. However, there are examples of community-based doula efforts that advocate for valuing "the doulas' work with salary, supervision, and support" ("HealthConnect One," 2011). This group also developed an accreditation process for community-based doula program replication across the nation ("HealthConnect One," 2011). Our findings suggest that most hospital doula programs are not at this stage yet, and there is no central organizing body for hospital-based doula efforts.

Training, Certification, and Evaluation

The variety of training and certification of doulas independently and in a recent survey of certified doulas is reflected in hospital-based programs (Lantz, et al., 2005).

The models and guidelines for training and certification for the leading doula organizations varies ("DONA International," 2005a; Birth Arts International Doula Education," 2012; CAPPA," 2013; Gagnon, et al., 1997). While this variety provides hospitals with options to tailor training to what they expect from their doulas, it may also contribute to the lack of uniformity of training and certification of doulas and subsequently impact the quality of doula service. Some standardization of essential training components could enhance the support provided by doulas in hospital settings, as well as legitimize the role in the eyes of other credentialed maternity care providers.

Among the hospital-based programs represented in this research, 13 reported efforts to bridge training gaps through doula mentorship. Mentorship served as both a training tool and an evaluation tool to ensure quality doula services. Questions remain about whether and how doulas should be trained and certified for hospital-based work, and if the hospital is a good place for doulas to gain experience. For example, hospital-based doulas could potentially benefit from additional training targeting particular situations related to the hospital setting and population served. Areas for further research and recommendations include the kinds of training hospitals should provide or require and the effectiveness of trainings as a means to recruit volunteers.

Coverage

While not at all hospitals, institutionalization of doula support within the hospital often differed from typical independent doulas in terms of coverage. This difference had to do with a reduction in prenatal interaction of doulas with women and in a few cases continuity of support throughout the entire labor. The work of a doula can be

challenging on many accounts: the timing and duration of labor is uncertain, doulas (whether employed or volunteer) must balance other responsibilities with doula work, and being on call is stressful (Lantz, et al., 2005). The hospital programs represented in our sample have developed a variety of creative solutions to help meet these challenges for the doula; it remains to be known how these service delivery solutions influence women's health. A network of doulas allows doulas to back each other up if they are unable to attend a birth, or when assigned a patient prenatally. Many programs used call shifts as a solution to provide doula services while minimizing the pressure of doulas to be continuously available for individual patients. Hospital doulas did not always remain with the woman throughout the entirety of her labor. A hand-off between doulas at the end of a shift was a solution by several programs. Current research suggests that support is most effective when it is continuous, provided by someone outside the woman's social network, and is the sole responsibility of the support person (Hodnett, et al., 2012; Sauls, 2002). It is not clear whether this continuous support must come from the same doula to be effective.

The scope of doula care within hospital settings is widely varied and raises the question of what is required for it to be beneficial for women. Specifically, does doula support require a certain level of prenatal accompaniment, and how critical is it that doula support is by one doula through the birth of the baby? Answers to these questions will likely depend on the objective of the hospital-based doula program and the outcomes the program is designed to target. For example, research on prenatal accompaniment by community-based doulas indicates there are benefits in terms of

low-birth weight (Gruber, et al., 2013), but this outcome is typically outside the scope of typical doula program objectives. A Cochrane review of research indicated that the effects of continuous labor support (provided by doulas, childbirth educators, midwife, nurse, family member, friend, or stranger) that occurs before active labor begins was stronger than when support began after active labor for outcomes including analgesia/anesthesia, spontaneous vaginal birth, and cesarean birth; the difference in timing of onset of continuous labor support was not significant for instrumental vaginal birth or dissatisfaction with childbirth experience (Hodnett, et al., 2007). In this review prenatal support was not part of the definition of doula support. Whether or not outcomes change if continuous labor support is provided by more than one doula or support person in a shift-like arrangement has not been demonstrated in the literature.

It is problematic to claim or suggest that doula support is a means to mitigate outcomes such as epidural use and cesarean section on an individual level, given the strong systematic influences on these outcomes (Morton & Basile, 2013). Given the variety in beneficial outcomes associated with doula support and the variety in doula service delivery presented in this study, hospitals considering or currently implementing doula services should consider what outcomes they are trying to impact, and develop process and outcome evaluation to determine whether and how their particular service delivery model may or may not influence their objective(s).

In conclusion, doula support during childbirth is one strategy for improving maternity care in the US. Hospital-based doula programs provide an opportunity to extend doula coverage to women that would not access it independently. We described

components of doula service delivery in hospitals across the US and provided a conceptualization of these elements for other hospitals. We found that in many cases hospital-based doula service delivery varied from independently accessed doula service in terms of the onset and timing of support. Understanding whether and how these variations impact women, her experience, and labor and birth outcomes warrants further research.

A strength of this research is the sample, which included a wide range of hospital and environmental contexts across the US; the findings have potential utility for a variety of hospitals considering a hospital-based doula program. A limitation is that we did not include doula programs associated with stand-alone maternity clinics and physician or midwifery groups. Comparing and understanding doula programs in other settings will be important in further understanding how doula service coverage is expanding, and potentially changing, within a variety of healthcare settings.

Future research should consider the positive and negative implications of moving doula practices into the hospital setting. For example, whether hospital-based doula programs are effective and able to provide doula support in the way that it is understood to be beneficial in the literature has not been comprehensively reviewed. Program and implementation evaluation studies of doulas as part of hospital systems could help build this evidence. Additional research should include how doula care can be part of larger efforts to comprehensively improve maternity care (Carter, Corry, Delbanco, Foster, Friedland, Gabel, Gipson, Jolivet, Main, Sakala, Simkin, & Simpson, 2010).

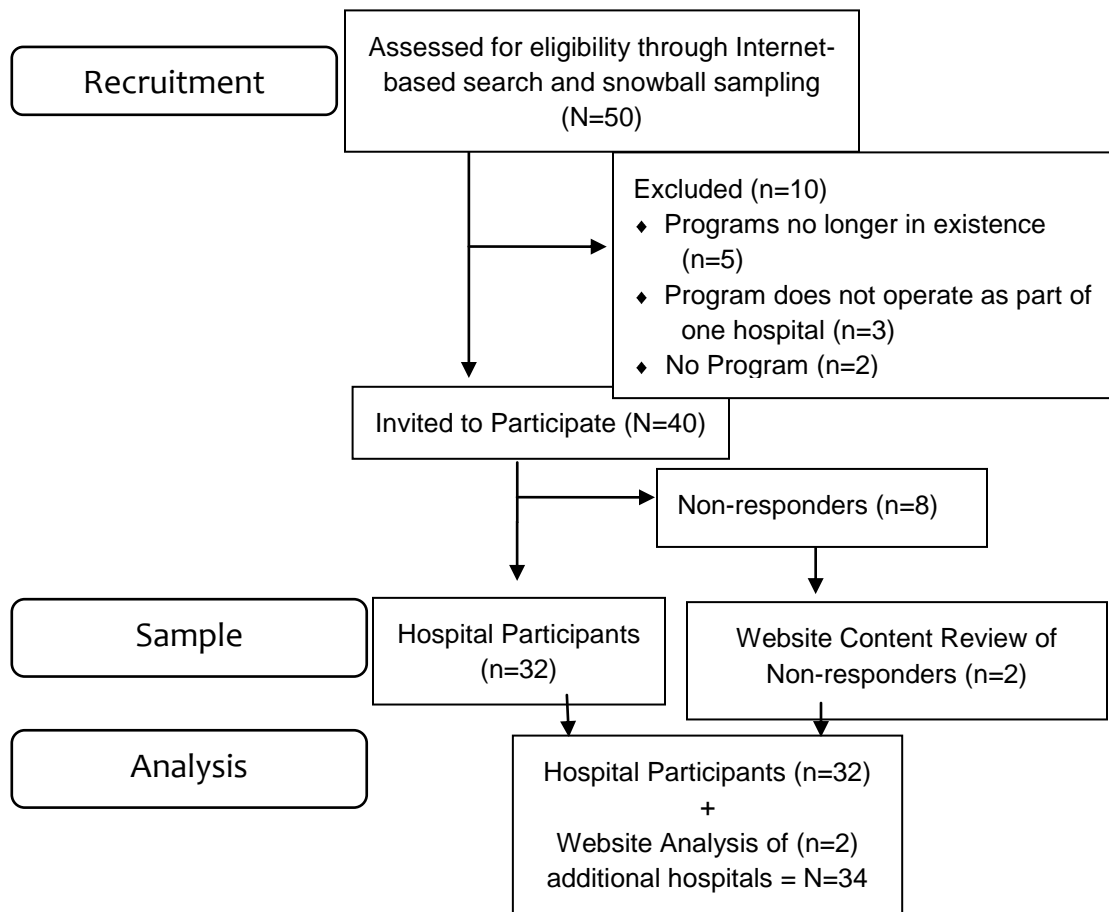


Figure 4.1: Sample Recruitment and Data Collection Flow Chart

Table 4.3: Regional location of hospital-based doula programs

Region	Number of Programs
Pacific (CA, OR, WA)	10
Northeast (CT, MD, MA, NH, NJ, VT)	8
Midwest (IN, SD, IA, MN, WI)	8
South (NC, SC, VA)	4
Southwest (CO, NM, TX, UT)	4
Total	34

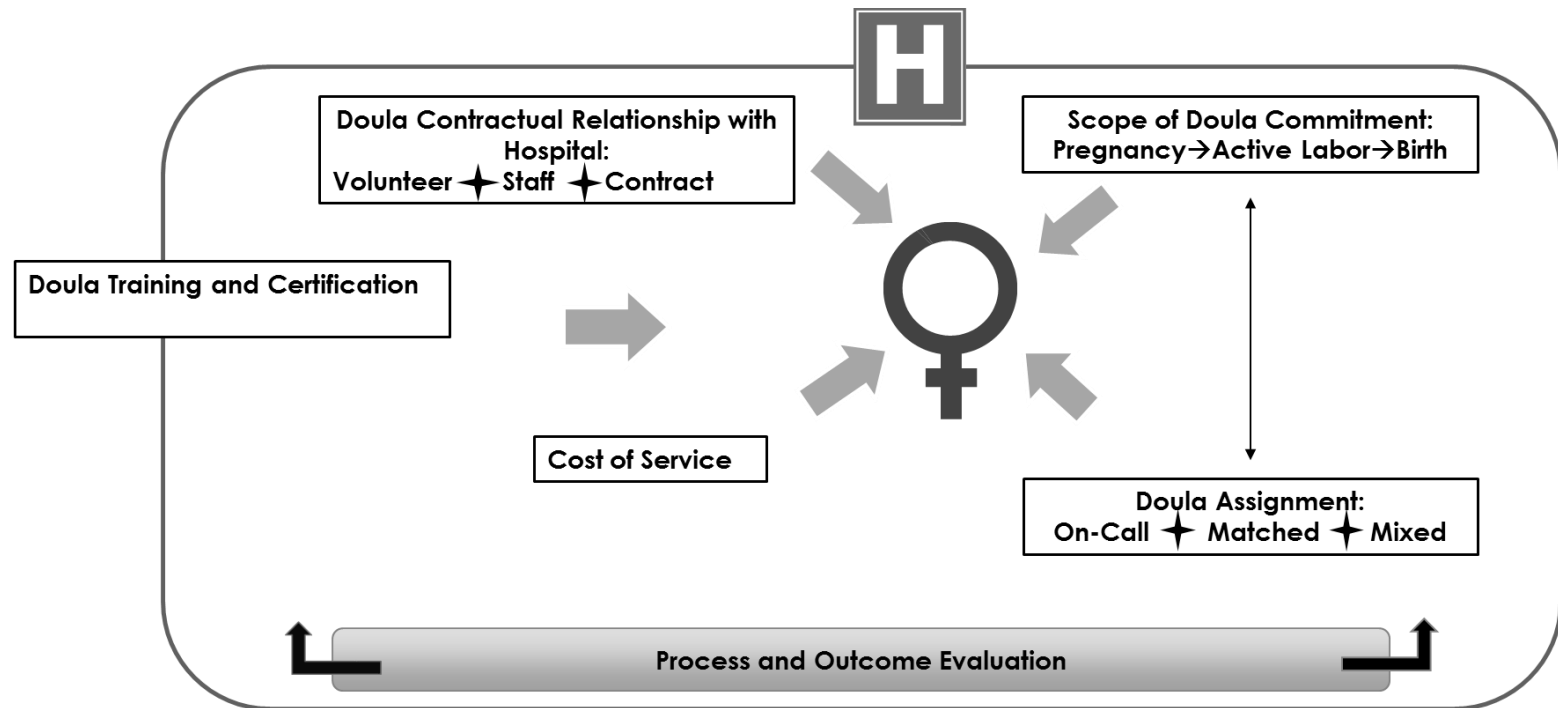


Figure 4.2: Doula Service Delivery Model in a Hospital Setting

Table 4.4: Hospital-based Doula Program Characteristics by Doula Contractual Relationship with Hospital

Program Type	# of programs	Cost to patient (\$)	Active Doulas (#)			Years in Operation		How Doulas Connected with Women		
			Range	Mean	Median	Range	Median	Prenatal Assignment	On-Call for Shifts	Both
Volunteer	20	Free	8-60	29	20	1-20	10	2	14	4
Staff	8	Free (n=5), \$75 (n=1), \$400 (n=1), \$425 (n=1),	2-20	10	8	10-20	13	2	6	
Contract	3	Free (n=1), \$50 (n=1), \$200 (n=1)	5-15	9	7	6-14	11.34	1		2*
Hybrid – Staff and Contract	2	Free (n=1) \$750 (n=1)	3-7	5	5	1-10	5.5	1	1	
Missing	1	\$750 (n=1)	Missing							
TOTALS	34	Range: Free-\$750	2-50	19.5	15	1-20	11	6	21	6

Notes: *Total = 33 programs for how doulas connected with women, 1 website reviewed program information unavailable

**one contract program has a prenatal assignment program as well as a free call program for bilingual patients. Another contract program has a prenatal assignment program for at risk or waterbirth clients, all others are on-call for shifts.

Table 4.5: Training and Certification of Hospital-based Doulas (N=32)*

Training	Total	Volunteer	Staff	Contract	Hybrid (Staff and Contract Doulas)
Require Doula Certification	7	1	3	1	2
Require Completion of Labor Support Course	16	10	5	1	
Hospital Provides Doula Training	15**	12	1	1	1
Mentor/Shadow Experience	16	9	4	1	2

Notes: This table is not summative as many programs fall into more than one category.

* n=1 for each of the following: Certified doulas are fee-for-service, uncertified doulas that have taken a training course are free to women. Uncertified doulas (n=2) have to become certified within one-year.

** One of these trainings is provided by a partnering non-profit group, not the hospital, and is focused on professional collaboration.

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CHAPTER 5

SUMMARY, IMPLICATIONS AND REFLECTIONS

Individuals within hospitals have found ways to increase access to doula support for women that otherwise would or could not access it independently. This research provides the first step in understanding doula support service delivery within the hospital context, how it is initiated, who is involved, and how it is supported within the institution. What follows is a reflection on some of the major findings from this dissertation research and the implications it has for women, the doula, healthcare, and for continued innovation within hospital systems.

First, I reflect upon the volunteer nature of doula support, care work (defined as work that directly involves care processes done in service of others and is often intrinsically motivated), as expected of women and undervalued within dominant medical structures, and how doula support via the programs in this study interacts with these systemic contextual barriers. I then think about the data in light of the tension between the medicalization of childbirth common in hospitals and the emphasis central to the doula's role on the woman and her experience, often referred to as humanizing childbirth (Davis-Floyd, 2001; Morton, C. H. & Clift, E.G., 2014). Next, I discuss what we can learn about innovation initiation within hospitals from this example of doula support. I highlight the individuals involved and the profitable connections important to

the institution. I then provide a brief discussion on future research needs to move this work forward.

Volunteerism, Emotional Health, and Care Work

First, we found that the majority of hospital-based doula programs are volunteer based. This indicates that while hospital institutions are initiating this humanistic innovation as part of their maternity care offerings, resource allocation remains minimal. In a commoditized healthcare system that is very much about revenues and profit margins as well as health, emotional support receives minimal attention by the larger health care institution, and in this case those providing the support, doulas, do not always receive compensation. On the other hand, we should acknowledge the hospitals in this study as being among the first to recognize and act upon the importance of social support during labor and birth through hospital-based doulas, regardless of the systemic difficulties in maintenance of these programs. Some of these hospitals have found ways to support and continue hospital-based doula services for as many as 20 years, when the majority of U.S. hospitals do not offer doula services at all. This alone indicates that hospitals and importantly the personnel within them value the role a doula can play in maternity service, for their clients, and for their business.

The idea of care work as expected or freely offered by women continues to be problematic within the predominant medical model and system of healthcare delivery in the US. So often in history women's work is expected as part of the extension of their gender and as such is offered freely (Messias, Regev, Im, Spiers, Van, & Meleis, 1997). Doula work is inherently women's work. Women do the work of birthing babies, and

support by other women that can understand and accompany a woman authentically is foundational to the doula's work. The doula works to protect and support the woman's emotional health during the time of labor and birth through acknowledgement and support of her desires, wishes, and needs. The doula is very much about centralizing the woman and her experience. A recent in-depth examination of doulas found that "doulas knowingly enter a field that is low paying but accorded great social value, especially among other women. At the same time, many doulas seem unaware how naturalizing labor support undermines their claims to 'professional' status (Morton, C. H. & Clift, E.G., 2014, p. 204)." Extending from these perspectives, doulas that feel every woman deserves labor support have a difficult time charging fees that render it impossible to access for some women (Morton, C. H. & Clift, E.G., 2014). This is evident as well in the opposing perspectives of program coordinators in this study, who disagree about whether or not they would like to see doulas paid by the hospital or other funding mechanism.

Next I discuss doula care operating as part of hospital systems, and address concerns about whether and how this may be a reflection of larger healthcare shifts.

Is the introduction of doula care into hospitals an indicator of the maternity care trajectory in the US?

This research suggests that the doula as "members" of hospital systems may contribute to or reflect a general movement within maternity care towards a more women-centered care model that acknowledges the significance of her emotional health. Generally, the doula centralizes women and her emotional experience during

the time of labor and birth, and generally views labor and birth as a normal, albeit momentous, episode in a women's life (Morton, C. H. & Clift, E.G., 2014). This is a somewhat radical position to hold within the hospital context. Emotional and one-on-one support historically was central to maternity care and implicit in the nursing profession (Green, et al., 2007; Leslie & Storton, 2007). This has been de-emphasized and frequently de-valued through the transition of birth from home to hospital, which has marked an increase in healthcare costs, medical specialization and technology, shortened hospital stays, and reduced interpersonal communication between health professionals and their clients (Dennis, 2003a).

Hospitals to some degree have shifted towards this perspective of women-centered care with the growth in birth centers and hospital-based midwifery practices, yet the medicalization of childbirth remains as indicated by high intervention and labor management rates across the nation ("HRSA MCH Programs; Maternal, Infant, and Child Health," 2013; Carter, et al., 2010). Other evidence that hospitals may be changing, or at least increasingly emphasizing the importance of psychosocial health, is the emphasis on patient-centered or patient-driven care, often reflected in efforts to improve patient satisfaction ("Driving Targeted Performance Improvement," 2014; IHI Triple Aim Initiative," 2014; Ishikawa, et al., 2013). Efforts to humanize medicine are part of initiatives to improve the standard of healthcare in the US ("National Solidarity Day," 2014). Although as a society our continued reliance on medical technology, including pharmaceuticals, as a, or the, solution persists.

Women act within and contribute to the societal norm that labor and birth is an event to be observed and monitored by medical professionals. Women value providers' reassurance of their baby's and their own health, and feel relief, comfort, and less anxiety when their health is confirmed and when they perceive their provider is sufficiently monitoring their pregnancy (Heberlein, E., 2014) and this is carried with them into their labor and birth, although this norm is shifting as indicated by a slight increase in the number of out of hospital births (Martin, et al., 2013).

In addition, the institutionalization of doulas within the context of the healthcare system creates the opportunity to support women that otherwise would not seek doula support, whether because of her perspective on what childbirth is about and/or her access to resources that would allow for an independent doula. For many women, finding doula support is last on a long list of things she is thinking about in terms of life, pregnancy, and the impending baby. For example, prenatal care access only recently became largely available for women, yet women still arrive at hospitals in labor with no prior prenatal care (Misra & Grason, 2006). A doula's presence for a woman that presents late in pregnancy or at the time of labor is an opportunity for that woman, who may be dealing with multiple life stressors and circumstances, to be supported and cared for as her life begins to shift in a big way.

It remains that most women have their babies in hospitals and doulas are going to the place that women are birthing babies to support them. What hospital-based doula initiatives have done is found ways to continue to support women from within the healthcare structures within which most women give birth. By doing this, doulas gain

acceptance and support by maternity care team members that are also working to ensure the health, safety and wellbeing of women and families. How this happens and what this looks like is an area of research that should continue to be explored. Others have reported on the working relationships between hospital-based doula volunteers and nursing professionals and highlighted the importance of a partnership and understanding between the two roles (Ballen & Fulcher, 2006). By working within the hospital, the doula is better able to understand the hospital environment and the workings within it, and the potentially adversarial relationship between doula and hospital is mitigated. Granted more research is needed to fully understand how the doula as part of a hospital system interacts with, works with, and is received to by other members of the healthcare team.

Additionally, medicine and technology have not sufficiently addressed the state of maternity care in the US. Medically oriented maternity care efforts continue to seek improvements and a deepened understanding of the factors at work that influence maternal and infant health and wellbeing. The doula has emerged on the radar of medical professionals, notably physicians, midwives, and nurses as a potential “intervention” or component of maternity care that can make a real difference for women, even if there is not a direct matchup between the larger public health benefits from this individualized action. Public health has recognized the significance of the life-course and the social and economic factors that influence an individuals and the public’s health (Corna, 2013; Mishra, Cooper, & Kuh, 2010; Misra & Grason, 2006). Even genomic explanations for disease requires an understanding of the socio-cultural

realities of our communities and histories (Milbrath, 2013). The public's health is a reflection of a myriad of factors, some more tangibly addressed than others. Maybe the doula is a representation of what healthcare wishes it could do for people. At our fundamental core, it can be argued that individuals want to be seen, heard and valued, especially during critical moments, transitions, and episodes in our life that can be simultaneously anxiety producing and full of celebration. Healthcare as it is currently structured, does not always allow for this. Not all women have supportive networks that do this. The doula is there as a means to fill the gap in services for women, to listen to her, support her, and make her feel valued.

Perhaps the doula is an example of how healthcare is changing, albeit slowly, from a medically dominated arena to a more holistic and humanistic arena that re-emphasizes the connection between mind and body. The US has not achieved this and any shift towards this direction remains fairly minor in the larger healthcare structure. While current healthcare reform efforts indicate a renewed emphasis on emotional health, prevention, and public health wellness, it remains an insurance-based system. The persistent presence of women at the bedside is not likely to go away as women will continue to seek out the support of other women and women with the "doula heart" will continue to offer their service. With continued advocacy and witness to these dedicated women working woman to woman, individual at a time, the power of accompaniment is likely to grow in its acceptance and legitimacy within healthcare institutions. This is evident through the perspectives and the centrality of those involved with doula program initiation within hospitals.

Innovation Initiation – the introduction of an additional member to the healthcare team

Investigating the social emergence of doula support within hospitals is an interesting innovation to explore as it is foundationally different than many innovations brought into hospitals. Typical innovations require behavioral or practice change by providers, whether it is introduction of new diagnostic procedures, medical technologies or other practice. The doula as innovation is the introduction of a new member into an environment that is already highly populated with individuals with particular roles and objectives (i.e., nurses, nurse techs, obstetricians, midwives, lab technicians, anesthetists).

Through this investigation of the emergence of hospital-based doula programs, we documented several major themes. First individuals within institutions place value on the innovation, in this case doula support, and then work to implement it, whether by their own accord or working within their institution to identify the person most able to develop and implement the innovation. From there the institution comes to support the innovation largely because it has the potential to attract clientele. The other way innovations are introduced is through collaborative efforts of teams sitting down to address a certain need or respond to funding calls and larger federal or state grants and initiatives. Through this collaboration process and/or mandate to search for solutions, innovations (like doulas) emerge, are explored, and initiated. Those involved with implementation then come to support and value it for a variety of reasons and continue it past any initial mandates or time-dependent grant mechanisms. Both routes of innovation initiation are particularly relevant given the expansion of Medicaid through

the Affordable Care Act and the impending rollout of directives to which healthcare facilities and institutions must respond.

At the same time, hospitals participate in a highly competitive market, and as such are inclined to seek innovations to maintain their market position (Frambach & Schillewaert, 1999). The sociological perspective is that institutions are motivated by a desire to appear legitimate to constituents, peer organizations, and outside stakeholders (Kennedy & Fiss, 2009). The demands of women for doula support alongside the growing evidence base that connects continuous labor support with outcomes of concern to the hospital industry is gaining traction. It is logical that hospitals acknowledge the renewed interest in alternate birthing environments by seeking to emphasize the “uniqueness” and “homelike atmosphere” of their hospital. The woman-centered approach of doulas, and their emphasis on creating a calm environment for the birthing woman is one way that hospitals can do this. Hospitals will introduce doulas or a women-centered approach to maternity care only if the general public and women themselves indicate that this is important and meaningful to them.

Within both of these “methods” of innovation initiation the individuals intimately involved with the identification of the innovation are central. These individuals span the hospital hierarchy, from doulas and lactation consultants to senior administrators, albeit the bulk of the development efforts originate from childbirth educators and nurses. This group of nurses, nursing managers, and childbirth educators, supports recent research that highlights the importance of middle managers for innovation implementation (Birken, 2012). Nurses were major players in both

initiating doula programs, and importantly in the development of these programs, if the idea generated elsewhere. The work of labor and delivery nurses, including nurse midwives, has changed alongside the medicalization of childbirth, the increasing charting and monitoring requirements, and the case loads assigned each nurse. While there are efforts to encourage continuous labor support by nursing staff (Hodnett, et al., 2002), it remains that nurses are often busy, manage a variety of tasks, spend a majority of their time charting and floating between rooms; it has become less common for or expected of a nurse to have the time to provide the bedside support that used to be integral to obstetric nursing (Davies, et al., 2002; Gagnon, et al., 1997; McNiven, et al., 1992; Papagni & Buckner, 2006). This dynamic profession may spur some nurses to pursue opportunities to bring in elements of their training that are declining due to high patient volumes and other changes. Roughly half of the nurses involved with doula program initiation were also childbirth educators or lactation consultants.

Childbirth educators and lactation consultants, in many cases also nurses, may represent what the literature identifies as boundary spanners, individuals that have significant social ties both inside and outside the organization and are able and willing to link the organization to the outside world (Greenhalgh, et al., 2004). Childbirth educators have a unique role within the hospital, as their work often takes them outside of the hospital setting to both do their work and pursue additional education. Childbirth education within the hospital can also be part of a larger perinatal education department which also includes classes and support network activities that are

physically separate from the hospital building, placing it “physically” closer to the community and stakeholders of concern.

Our results also indicate two distinctions worthy of further exploration. These are that innovations gain traction within hospitals because of concerns with patient satisfaction and attractiveness to potential clientele and it also has to do with meeting the needs of populations of women that may need or benefit particularly from additional services, unique innovations outside routine medical practice. This reflects the hospital reality of serving a range of women from public to private to under-insured women. A couple of programs provided this “innovation” free of charge to those that fit certain criteria, whereas some women with the ability to pay paid for the “innovation”.

The US healthcare system still relies on external and unique grant initiatives to supplement standard care for individuals that are often under or uninsured or vulnerable populations, as well as for opportunities to explore innovative ways to improve quality, cost, and efficiency of healthcare. U.S. infant and maternal morbidity and mortality rates continue to remain suboptimal when compared to other high-income countries, especially for groups of women that fall into low social and economic categories (Kim & Saada, 2013). Class and race distinction do exist in the US, and it is evident in the disparities in maternal and infant health outcome data (Bryant, et al., 2010). Grant initiatives will continue to be a predominant mechanism for organizations, including hospitals and their community extensions, to pursue innovations and solutions for socially divergent labor and birth outcomes. Doula support will likely continue to be an attractive low-cost targeted improvement effort. The next step is to find ways for

the hospital to assimilate grant-based initiatives into the standard of practice as some hospitals have been able to do.

Synopsis and Future Research Needs

Doula support during childbirth is only one aspect of improving maternity care outcomes. Efforts to include doula support as part of larger improvement efforts is warranted. This will take time as the doula “places women’s emotional experience at the center of this life event (childbirth). Bringing this philosophy into the hospital is risky, even in the context of patient-centered care and shared decision making (Morton, C. H. & Clift, E.G., 2014, p. 306).” Our research indicates that actors within the hospital are well on their way to bringing this “philosophy” into the hospital setting, albeit structural and resource support is largely needed. Hospital personnel involved with initiation of doula programs value doula support and make claims about its value for women, including her satisfaction and autonomy. Other claims reflect a respect for women and a belief that all women deserve support. Our findings suggest that doulas are valued by maternity care providers for their impact on women, and that framing this innovation within the business model is critical for institutions formal adoption and continuation of these programs.

The results have implications for continued efforts to improve comprehensive maternity care and the direction and development of the doula as a member of maternity care teams, while also expanding our knowledge of the ways innovations emerge within hospital institutions. Hospitals that are overcrowded and understaffed, compromising the quality of intrapartum care for women (Bingham, et al., 2011) could

benefit from the addition of a doula program that could meet the gap in supportive services from other members of the maternity care team. Hospitals that have or are considering initiating hospital-based doula services can learn from these successful programs and use this research as leverage for what may continue to be a growing movement within the hospital maternity industry.

At its core, doula support within the hospital setting generally reflects the foundational component of the doula which is provision of social support to women during labor and birth. While there are nuances about the timing and onset of this support, the supportive action by the doula does not appear to be significantly altered by being offered through the hospital. Additional process and outcome evaluation research would contribute to a more thorough understanding of the variations in doula service delivery. It is possible that some programs have different intentions in terms of outcomes, or by consequence of their service delivery model have more impact on certain outcomes than others.

Furthermore, the components of doula service delivery identified here warrant and require further understanding in terms of its influences and effects on women, her experience, satisfaction and labor and birth outcomes. The variations in the models of doula service delivery within hospital settings challenges the predominant understanding and definition of birth doula support and may have real implications for women, and for the doula and her training needs. On the other hand, these variations are ways that hospitals creatively support women given the challenges of working within the hospital, the uncertain onset and timing of labor, and the balance of

providing support by women that have other commitments outside their volunteer or staff work as a doula. The doula's greatest strength is to identify the nuances of each individual situation and support each woman in the best way possible in that given moment in time. Doulas come into the work for a variety of reasons, express frustration and experience dilemmas while providing support as clearly outlined in Christine Morton's research (C.H. Morton & E.G. Clift, 2014), yet at the heart doulas want to do what is best for the woman in that moment, even when it may differ from their own frames, perspectives, knowledge, and feelings about the situation. The creative solutions by the hospitals in this research to provide a doula for women that otherwise would not have the option is reassuring and suggests that the doulas in these programs see the work they do, to whatever degree possible, as beneficial and important for women that otherwise may not have the additional support by a trained companion.

Future research should include how doula care can be part of larger efforts to comprehensively improve maternity care (Carter, et al., 2010). This study did not include doula programs as part of maternity clinics and physician or midwifery groups. Comparing and understanding doula programs in other settings is important to understand how doula service coverage is expanding, and potentially changing, within a variety of healthcare settings.

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APPENDIX A

EMAIL RECRUITMENT / INFORMED CONSENT

Study Title: Hospital-Doula Program Inquiry

Dear (insert name of program coordinator):

I am contacting you regarding your involvement with (insert name of hospital and doula program). My name is Violet Beets and I am conducting research at the University of South Carolina with Dr. Edward Frongillo as part of the requirement of my degree in public health, and I would like to invite you to participate.

We are interested in learning more about your doula program, its services, how it was established, and some of the lessons you have learned along the way.

Description of Study Procedures:

If you decide to participate, you will be asked to answer some interview questions about your doula program. In particular you will be asked about the type of services provided by the program, and some information about successes and challenges of the program. The session will be audio-recorded so that I can accurately reflect on what is discussed. The audio recording will only be reviewed by members of the research team who will transcribe and analyze them. They will then be destroyed.

Confidentiality and Voluntary Participation:

Your participation in a 30-40 minute telephone interview is completely voluntary and confidential. Site-specific information will be kept anonymous when the survey results are analyzed. You do not have to participate in this study if you do not want to and you can withdraw at any time. You do not have to answer any questions you do not wish to.

Risks and Benefits:

There are minimal, if any, risks involved with participation in the study. While there are no direct benefits to participating in this study, your participation is important for us to understand the variety and scope of doula programs across the U.S. and how others may learn from programs like yours that seek to support mothers and families at the time of childbirth. Upon your interest, I will also provide you with a copy of the results of the study.

We will be happy to answer any questions you have about the study. You may contact me at 803.403.5980 or violet.dawn.beets@gmail.com or my faculty advisor, Edward Frongillo, 803.777.4792 or efrongillo@sc.edu if you have study related questions or problems. If you have any questions about your rights as a research participant, you may contact the Office of Research Compliance at the University of South Carolina at 803.777.7095.

Thank you for your consideration. If you would like to participate, please review the attached interview and reply positively to this email with a time for me to call you.

With kind regards,

Violet D. Beets, MPH, CD(DONA)
PhD Candidate
Health Promotion, Education, & Behavior
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APPENDIX B

SEMI-STRUCTURED INTERVIEW GUIDE

Semi-Structured Telephone Interview with Open-Ended responses

Hospital Code: _____

Start date/time: _____

Thank you for agreeing to participate in this survey. If I come to any question that you prefer not to answer, just let me know and I'll skip over it. Do you have any questions before we begin?

1. What is your position and title at _____(hospital name)?
2. Can you tell me a little bit about how you got into this type of work?
3. Can you tell me about your educational background, including the specific training for your current work?
4. Can you tell me some more about why you do the work that you do?

Prompt: What do you see as the most important aspects of your work?

The next set of questions is about the organizational structure of your doula program.

5. Who coordinates the Doula Program? _____
6. Who do doulas report to? **[or]**Who supervises the doula program?

7. How many active doulas do you have in your program at the moment?

8. Are the doulas:

☐ Hospital staff

☐ **[If Hospital staff:]** Are they :

☐ On-Call for hourly shifts?

☐ How many hours? _____

- ☐ Assigned Patients Prenatally
- ☐ Other? _____

- ☐ Hospital volunteers
- ☐ Other _____

9. How are doulas trained in your program?

- ☐ **Earn Certification Through Experience at Hospital.**
 - ☐ Which certification agency? _____
- ☐ **Must be certified to work or volunteer**
 - ☐ Which certification agency? _____
- ☐ **Training is provided through the hospital but it is not a certification process**
 - ☐ What does this training consist of? _____
- ☐ **Other** _____

10. On average how many doula-assisted births are there per month at your facility?

11. How many average total births are there at your hospital per month?

12. Do you have data on the demographics of your patient clientele? Or a sense of the demographics of the women that receive doula support?

Prompts: Spanish Speaking,
 Women eligible for Medicaid,
 White, Educated
 Other _____

Prompts: How do you know this about your clientele?

13. Are doulas available for all women who want to work with one?

- ☐ No
- ☐ Yes
 - ☐ [If yes:] Please explain: _____

[Prompts: income qualifying, teens, as doulas are available]

14. Is your program able to meet the demand for doulas?

- ☐ Yes

☐ No

15. Is there a referral process?

☐ Yes

☐ No

16. How are doulas assigned patients? _____

The next set of questions is about the scope and services of the doula program.

17. What fees or charges are there for doula services? _____

☐ Fee _____

☐ Free _____

☐ Other _____

Additional Information Regarding Charges: _____

18. Do doulas have prenatal contact with the mother prior to coming to the hospital?

☐ Yes

☐ No

[If yes,] please explain how this works: _____

19. How much postpartum contact do doulas have with the mother?

What does this look like?

Now I'm going to ask you some questions about how the program was started and is currently implemented.

20. When did the doula program start?

Year _____

21. Can you tell me about some about why the program was started?

22. Who were key facilitators getting the program off the ground?

Prompts:

- Who was the driving force behind the program at the beginning?
- Who thought it was a good idea?
- Were women involved in the adoption process? How?

23. How is the doula program funded?

☐ **Part of hospital service**

☐ **Fundraising**

☐ **Grant**

☐ **Other** _____

24. Does the doula program have enough resources to operate?

☐ Yes

☐ No

○ What resources do you think that they need? _____

☐ What additional resources do the doula's share that they need?

25. What sorts of records and/or evaluations are done to evaluate the program?

26. How are these evaluations used?

—

27. How are doulas themselves evaluated?

28. Are you aware of any hospital policies or procedures that had to be incorporated and/or changed to get the doula program started?

How about any policies or procedures that have changed now that the program is up and running?

Prompt: For example, are all women asked if they want a doula during admission or intake process?)

29. What kind of training do nurses and doctors receive about the doula program?

☐ No Training

☐ **Type of Training**_____

30. On a scale of 1-4, how do others working in labor and delivery recognize the importance of doula support for mothers and families?

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4

Why do you think that those working in labor and delivery view doula support in this way? _____

31. Can you tell me a little bit about how the doula program fits within the overall labor and delivery department?

32. How do nurses and doctors know that a patient has a doula assigned?

33. What sorts of work interactions do doulas have with nurses and physicians?

34. Do doulas collaborate with nurses and physicians or do doulas primarily work with the patient? Can you explain some about this?

35. How well does the doula program fit in with the overall hospital mission and workplace culture?

This next set of questions is centered around the success and challenges of the doula program currently and during the beginnings of the program.

36. In your opinion, what have been some of the successes of your program?

37. In your opinion, what have been some of the challenges or barriers to success for your program?

38. Can you tell me about any solutions or things that have been tried to address these challenges or things you think should be tried?

39. If you were advising someone who wanted to start a hospital based doula program what advice would you give?

—

40. Is there anything I have not asked that you would like to share about your program, your experiences with it, or anything else we haven't touched on?

—

41. Are you aware of any other hospital-based doula programs? (If so, ask for contact information if not already identified through Internet search or by others)

I'd like to end by asking some basic demographic information **Just give the category title and allow the participant to fill in the blank.**

Q Gender:

- ☐ Male
- ☐ Female

Q Age:

Q. Ethnicity

Please specify your ethnicity.

- ☐ Hispanic or Latino
- ☐ Not Hispanic or Latino

Q. Race

Please specify your race.

- ☐ American Indian or Alaska Native
- ☐ Asian
- ☐ Black or African American
- ☐ Native Hawaiian or Other Pacific Islander
- ☐ White

Q Years worked here:

- ☐ 0-5
- ☐ 6-10
- ☐ 11-15
- ☐ 16-20
- ☐ 21-25
- ☐ 26-30
- ☐ _____

Q. Education

What is the highest degree or level of school you have completed? (If currently enrolled, mark the previous grade or highest degree received.)

- ☐ No schooling completed
- ☐ Nursery school to 8th grade
- ☐ 9th, 10th, or 11th grade
- ☐ High school graduate – diploma or GED
- ☐ Some college
- ☐ 1 or more years of college, no degree
- ☐ Associate degree (for example: AA, AS)
- ☐ Bachelor's degree (for example: BA, AB, BS)
- ☐ Master's degree (for example: MA, MS, MEd, MSW, MBA)
- ☐ Professional degree (for example: MD, DDS, DVM, LLB, JD)
- ☐ Doctorate degree (for example: PhD, EdD)

Would you be able to send me any program materials that may be of interest?

Particularly, materials that would be sent to a potential doula client?

End Time _____

Thank you for your time today. This information is very useful for our research. If you have any further questions about our survey, please feel free to call me 803.403.5980.

Would it be okay to contact you with any follow up questions? _____

Additional Comments: